

The **AGRICULTURAL EDUCATION** *Magazine*



The Agricultural Education Magazine



A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by Interstate Printers and Publishers, Danville, Illinois.

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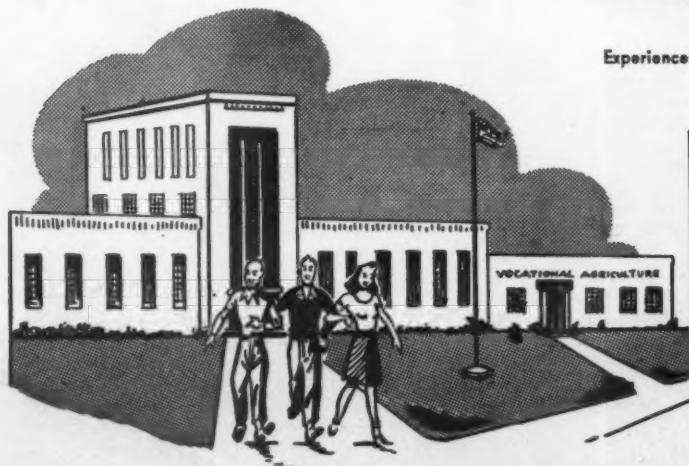
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Contents

Editorials

Decision Making..... 147
Contributions To Magazine In 1951..... 147

Paths To Farm Operatorship..... 148
H. P. Sweany.....

Adult Education Association..... 149

Planning Instruction For Successful Establishment
In Farming..... 150
A. G. Bullard.....

Secrets of . . . Profitable Farm Visits..... 152
William H. Knight.....

The Subsistence Issue and Establishment..... 153
Cedric A. Lafley.....

Farm Placement Opportunities..... 154
Harry T. Miller.....

A Study of the Occupational Status of State Farmer
Degree Members In Kansas..... 155
Frank R. Carpenter.....

Vocational Education and The Individual..... 156
Raymond M. Clark.....

Veterans Teach Safety..... 157
L. B. Fidler.....

Improving Supervised Farming..... 158
George P. Deyoe.....

The F.F.A. 162
C. S. McLearen.....

F.F.A. Strengthens Instructional Program..... 163
George W. Sledge.....

Farm Safety Award..... 164
M. B. Jordan and
W. C. Geiger.....

Our Cover..... 164

Summer Experiences In Student Teaching..... 165
Edwin Jaenke and
Charles W. Fechtig.....

Experiences and Performance..... 166
David Ross McClay.....

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Editorials

Decision making

IN THE routine of the work-day it is easy to lose sight of our role in decision making. Yet, every thinking person recognizes that the sum total of teacher decisions is setting the stage for tomorrow's history.

Decisions made by teachers of agriculture determine the nature of the total program, and the specific values to be gained by individuals. Decisions are involved in everything that a teacher does from building the long-time program of work to holding individual conferences on establishment in farming. Any who doubt might try keeping a record of the number of decisions made in the course of a day. Our recognition of the importance of decisions and our work for quality in decision making are prerequisites to success.

As an example of our decision making role let us examine the theme of this number "Establishment in Farming." Just because certain individuals in a leadership position have said that progressive establishment in farming is one of the goals for vocational agriculture does not make it so. Actually, this is quite largely an individual teacher decision. Departments of vocational agriculture and teachers have survived for many years with a record of establishment in farming so low as to be practically zero. Most of us would agree that the teacher, in this case, made some wrong decisions but the fact remains that the results can be traced to teacher decisions.

Most teachers do decide that progressive establishment in farming is a worthy goal. Other decisions follow. Problems of who should be enrolled, standards for farming programs, time to be devoted to individual guidance and instruction, kinds of local data to be secured, and many others involve teacher decisions. Are these decisions vital for achieving the indicated goal? There is ample evidence in our research findings to convince us that these decisions are significant. Teachers must, then, make many decisions which are related to establishment. The decisions which teachers make will determine the extent to which establishment is, first of all, a goal of vocational agriculture and, secondly, they will govern the effectiveness of the work which the teacher does in reaching the goal. Decisions do matter.

Improving the Process

In view of the number and importance of the decisions which teachers are required to make we might expect to find greater emphasis on the problem in the pre-service program and in the literature. Actually, however, it is difficult to provide realistic training in decision making except on the job. The infinite variety of situations with which teachers are required to deal precludes a standard pattern. Guiding principles for the decision making process are common knowledge, but too often they are mere verbalisms so far as can be ascertained from the functioning of some individuals. To identify the problem, secure the facts, evaluate the facts and, reach and test the conclusions, are steps which some teachers regard as appropriate for science, but not for them in the decision making process. We need to apply such steps in day-to-day decision making. Even though we learn decision making on the job we can learn to follow a more or less uniform process as a means of improving quality.

The business of making decisions needs to be practical. Usually it will not be possible to lay out the whole thing on paper but developing an habitual response in process of thinking it through will be helpful. Too, we need to share in decision making. This is especially true as larger problems of policy are involved. Advisory committees, conferences with administrative officers, and other means are helpful in insuring that all points of view are considered. Such sharing is especially vital in education, government or areas where the exactitudes of physical science can not be applied in reaching a decision.

(Continued on Page 155)

Contributions to magazine in 1951

HOW well does the magazine serve its readers? To some extent the answer is reflected in the analysis of sources of articles for the past year, which is presented herewith. It shows the extent to which different groups contributed and also gives the contributions by states. As a cooperative service it can best be improved by the membership or in this case the readers. Suggestions and contributions from teachers, especially, are welcomed.

Contributions to the Agricultural Education Magazine, by States — January, 1951-December, 1951, Inclusive

State	Contributors					Approximate Column Inches (Total)
	Supervisors	Teacher-Trainees	Teachers	Others	Total	
Alabama		1			1	27
Arkansas			1	2	3	64
California	1	6	1		8	171
Colorado		2			2	46½
Delaware		1			1	15
Florida	1	1	4	2	8	106½
Georgia	2			1	3	97¾
Hawaii	1		1		2	29
Idaho			2		2	52
Illinois		11	5	1	17	514
Indiana	1		1	1	3	204
Iowa		2	3	2	7	175½
Kansas		3	1		4	119
Kentucky		3			3	97
Louisiana			1	2	3	39½
Maine		1			1	54
Maryland	1	1	3		5	130½
Massachusetts			4		4	71¾
Michigan	1	5	5		11	468¾
Minnesota	1	3	1		5	159
Mississippi				1	1	24
Missouri		2		1	3	64
Montana		2	1		3	76
Nebraska			8	1	9	235¾
Nevada			1		1	17
New Hampshire	1	2	3		6	71½
New Jersey			3		3	95
New Mexico	1				1	53
New York		2	4	2	9	259½
North Carolina	1	4	1	1	7	192
Ohio	4	4	1	2	11	239
Oklahoma			1		1	8¾
Oregon				2	2	38½
Pennsylvania		3	3	1	7	170½
Philippines				1	1	53
South Carolina	1		1		2	51
Tennessee		5	1	1	7	220
Texas	1				1	20
Utah	5		1	2	8	159
Vermont			6		6	124
Virginia		2	5		7	216½
Washington	2	1	9		12	313½
Wisconsin	2		3	1	6	128
West Virginia	1		2	2	5	176
Totals	29	58	94	30	211	
U. S. Office		6	119½			
Editor		24	208½			
Miscellaneous		2	69			

Paths to farm operatorship

Patterns of occupational advancement of some present day farmers

H. P. SWEANY, Teacher Education, Michigan State College

The Agricultural Ladder



H. P. Sweany

MORE than 30 years ago W. J. Spillman¹ first reported a study made of the occupational advancement of farmers of that day to the owner status. In this report Spillman indicated that farmers had been in three statuses prior to owner status. This ad-

vancement was known as the "agricultural ladder" which farm boys must climb to achieve ownership of a farm. Although only 20 per cent of the owners in the study had used all statuses (rungs) to become farm owners, the "ladder" was referred to as having four rungs, namely: farm boy identified as (F), hired man (H), tenant (T), and owner (O). The sequence of rungs being represented by F-H-T-O.

Immediately following the report on the agricultural ladder other economists and sociologists made studies of the occupational advancement of farmers. These included statuses such as non-farm work (L), partnership (P), wages at home (W). Kenestrick² of the Ohio State University was one of the first to recognize the project or income from one or more farm enterprises (E) as a status important in the advancement of farm youth to an operator status. Recently, Marshall Harris³ described the new agricultural ladder consisting of five rungs one of which was labeled "project agreements." The project agreement is similar to a status mentioned above as "income from one or more farm enterprises" (E).

For the most part studies of the agricultural ladder and those dealing with the transfer of farm property have over simplified the routes used by farmers in achieving the farm operator level. Actually there are many variations of occupational advancement, nearly as many as there are farm youth seeking to achieve a higher status in farming. As teachers and leaders in vocational agriculture we need to recognize the importance of guiding farm youth in capitalizing on the factors which may determine the statuses through which a person should advance. A farm youth should not be encouraged to follow the common pattern of advancement without determining if the factors surrounding his life justify such action.

In order that teachers and others might have other occupational information concerning the advancement of farmers toward establishment, this report of a study made in Indiana⁴ is given. The purpose of this study was to get the patterns of occupational advancement of

operators who had achieved an operator status since 1919 until 1942 in five Indiana Counties. Statuses which other studies of the "agricultural ladder" had used were used in order that similarities and differences between the findings might be discovered.

Relative Importance of Statuses

The relative importance of the various statuses in the patterns of occupational advancement is shown in Table I. It can be seen that the status of the hired man

quences, certain combinations of patterns were made. As an example in Table I it was shown that 100 farm operators were past the allowance status at 14 years of age. Since the occupational statuses of the operators was not known prior to 14 years of age and since only 29 per cent of the operators had not achieved an owner status, the patterns of many could not show either one or both extremes of the sequence of statuses of their eventual occupational advancement. Because this was true, patterns such as F-E-T-O, F-E-T, E-T-O and E-T were considered identical and were grouped. The group symbol was E-T which all had in common. Other similar but not always identical patterns were combined to reduce the number of group patterns to 16. These are shown in Table II.

TABLE I.—The number and percentage of farm operators who had experience in ten occupational statuses and the number in statuses at 14 years of age.

Symbol	Status	Number in status at age 14	Number having been in status	Percentage having been in status
F	Allowance	324	326	77
E	Income from enterprises	62	114	27
Ph	Partner at home	4	114	27
Pa	Partner away from home	1	28	7
W	Wages at home	3	33	8
H	Hired man	18	143	34
La	Non-farm agricultural work	1	29	7
Ln	Non-agricultural work	11	124	29
T	Tenant	0	367	87
O	Owner	0	126	29
Total		424		

was still the most common one in the advancement of farmers when this study was made at the beginning of World War II. However it is significant to note that approximately one-third of farmers had engaged in non-farm work in advancing toward an operator status. The number of farm operators who had been partners in a business and the number who had received an income from farm enterprises was nearly the same. When one considers that over one-fourth of farm operators had had experience in two statuses which in studies made 20 years earlier were not important enough to have been listed, one sees the changes in the manner of advancement in farming which is taking place.

Patterns of Advancement

Spillman's agricultural ladder had four statuses, but there were really four patterns of advancement. Using the symbols in their temporal sequence the patterns can be shown as F-H-T-O, F-H-O, F-T-O, and F-O. The first pattern characterized those who were farm boys, then hired men, and later becoming tenants and finally owners. The other patterns listed above omitted one or more statuses in achieving ownership.

In the Indiana study made in 1942 of 424 persons who had achieved an operator status (either owner or tenant) since 1919, 130 different patterns of occupational advancement were found. Seventy-seven patterns had only one case each! Only three patterns had more than 20 cases and a major portion of the remaining 50 had less than 10. Since many patterns were incomplete se-

Some Characteristics of Operators in Different Groups

One of the desires of farm youth seeking to become farm operators is early establishment. Table II shows that the farm operators who had achieved a tenant status immediately following a period when receiving income from farm

TABLE II.—The number and beginning age of farm operators with different group patterns of occupational advancement.

Group patterns	Number of cases	Age when becoming operators
E-T	42	23.78
E-H-T	15	24.00
E-P-T	25	24.00
F-T	56	25.48
P-T	42	25.64
W-T	16	26.00
At home-O	10	26.30
P-O	19	26.47
Operator, non-operator, operator	12	26.75
F-L-T	28	27.42
H-T	43	27.48
[P]		
L-W-T	25	27.88
[H]		
H-P-T	19	29.16
P-L-T	18	29.16
E-L-T	26	29.88
H-L-T	26	29.88
L-O	28	33.36

enterprises were the youngest group. However, the difference between their beginning age and those of the groups achieving the operator status before 27 years of age was not statistically significant at the one per cent level. Possibly larger numbers in groups might have shown an age difference of two years significant. It was easy to show that farm youth who remained in statuses on their home farm became farm operators earlier than those who worked as hired men or as non-farm laborers.

It is also significant to note that those who had incomes from farming tended to remain in school longer than those who worked for wages. Furthermore, those who had been in partnership at home tended to begin farming nearer home than others did. The status, income from enterprises, tended to be associated with enrollment in vocational agriculture although many persons not having had vocational agriculture or 4-H Club training had also been in this status. Those farm operators who left the home farm tended to come from smaller farms. In some cases the competition for work opportunities on the home farm by other brothers tended to force some to seek vocational opportunities away from home.

Routes to a Farm Operator Status

Farm youth who may be considering the results of this study may still be concerned about adopting some given plan for themselves. More often one step is taken at a time without too much assurance of what the next may be. For those who cannot make long-time plans with assurance that they may achieve them, the figure entitled "Paths to Farm Operatorship" may be more valuable. It is set up in such a way that if a youth in any given status wonders what the best shift to make is, he can see what are the shifts which others have made. The width of the paths are determined by the number who have made such shifts. It is interesting to note that while most of the paths are one way paths, some statuses are on such a similar level that farm operators have gone in both directions between the statuses. One further point of significance is that partnerships are more likely to lead to a tenant status than to an owner status.

The Significance

There seems to be one point which should be emphasized as a result of these findings. It is, that every student of vocational agriculture is sufficiently different in opportunities and abilities that his plan for becoming a farm operator may be unique. If he capitalizes on his home situation, for example, a partnership may not have any advantage over the ownership of a small business, in terms of projects, within the total farm business.

There seem to be advantages for youth who may remain at home. Such youth should not develop their business at the expense of their fathers. The total farm business should grow as the farm youth's business or share grows so

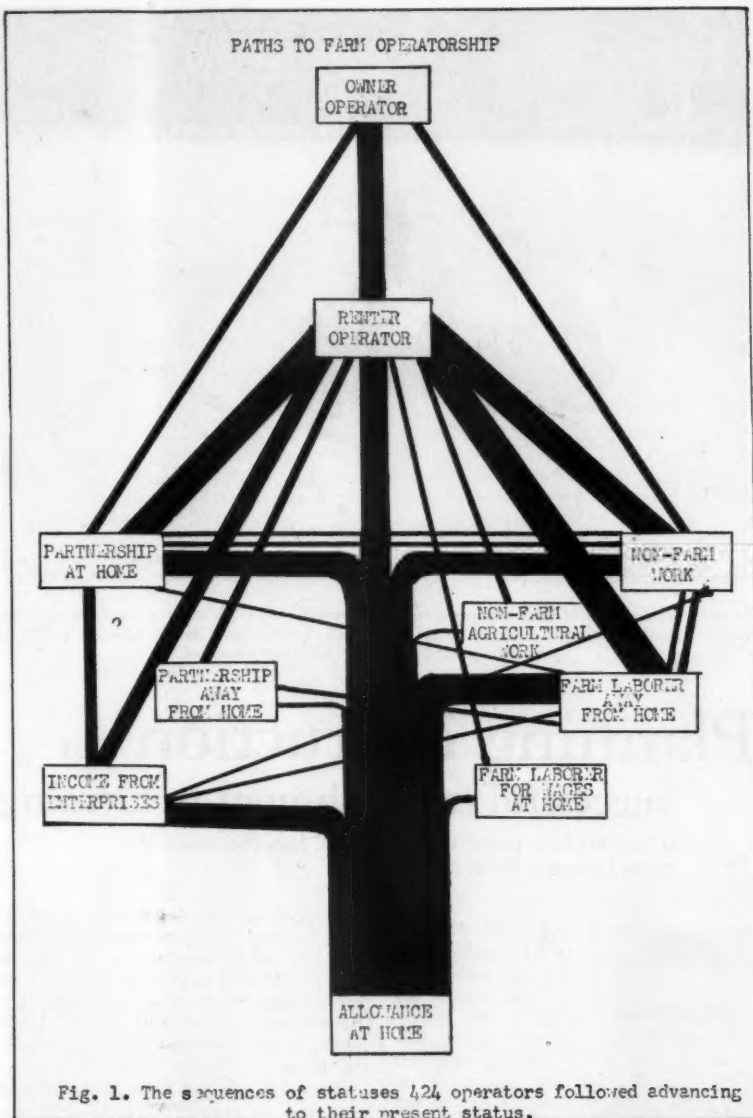


Fig. 1. The sequences of statuses 424 operators followed advancing to their present status.

that when the new operator starts on his own, the business left to the father will be strong enough to provide adequately for his family. In actual contact with these new operators there seemed to be psychological advantages for the young men who started on their own early as compared to those who delayed.

The development of farming programs that must be fitted into a going farm business should be shared by the student, his parents and the teacher if it is to develop and grow in a sound business-like way.

¹ W. J. Spillman, "The Agricultural Ladder," *American Economic Review, Supplement*, 9:170-179, March 1919.

² H. G. Kenestrick, *Some Economic Factors Affecting the Establishment of All-Day Students of Vocational Agriculture in Ohio in Farming*. Unpublished Doctoral Thesis. Pp. 205. Ohio State University, 1936.

³ Marshall Harris, "The New Agricultural Ladder," *The Agricultural Situation*, Volume 35, Number 5, Page 7-8.

⁴ H. P. Sweany, *The Educational Significance of Opportunities and Patterns for Becoming Farm Operators in Indiana*. Unpublished Doctoral Thesis, pp. 195, Purdue University.

Adult Education Association

THE Adult Education Association of the U. S. A. has received a grant of \$94,000 from the Ford Foundation for 1951-52; a similar amount has been set aside for 1952-53, subject to a review of the progress of the sponsored project at the end of the first year.

The funds will be used to establish a monthly magazine, tentatively being called "Leadership," which is intended for adults of all the sorts who have responsibilities for the education and training of other adults, including leaders in the P.T.A. and other organizations; persons in business, industry, and agriculture responsible for training programs; and laymen who serve as part-time teachers of adults in schools. They will also be used to help in strengthening the organization.

(Continued on Page 151)



Teacher supervision of farming programs is essential to establishment in farming. Joe Tunnell, teacher of agriculture at Weeksville High School, and James Chambers discuss up-to-date practices in hybrid corn production.

Planning instruction for successful establishment in farming

A. G. BULLARD, Subject Matter Specialist, State Department of Public Instruction, North Carolina



A. G. Bullard

A FEW days ago I heard a teacher ask a supervisor, "How am I doing?" The supervisor's reply was, "Tell me what you are trying to do and I'll try to tell you how you are doing."

The first thing that you and I should do in planning a course of study for all-day boys is to ask ourselves the question, "What am I employed to do?" A partial answer to this question may be found in the general aim of vocational education in agriculture—To train present and prospective farmers for proficiency in farming.

If we study this statement carefully, we will notice that it does not suggest that our job is to change the yield of corn, to increase the acres of pastures, to control cotton insects, to beautify the home, etc. These improved practices may be needed and they may be profitable practices for farmers to follow but they are not educational objectives. Educational objectives deal with individuals. It is our job as teachers of vocational agriculture to plan and carry out a program of instruction which will develop proper attitudes, appreciations, knowledge and skills that will result in the individual having the ability to choose

and apply improved practices in whatever farming situations he may find himself. In other words, our job is to change man's behavior as it relates to his vocation. This, it seems to me, is a fundamental principle to keep in mind while we plan courses of study for all-day boys.

Since the general aim of vocational education in agriculture is to train individuals for proficiency in farming, let us look for an answer to the question, "What is a proficient farmer?" I believe we can find this answer in an analysis of successful farmers in a given community. What would this analysis show? Collectively we would probably find among the success factors the following:

1. They enjoy farming. To them farming offers not only a means of making a living but also a place to really live.
2. They appreciate the natural resources of the farm and have the desire and know how to protect them and to use them wisely.
3. They have the ability to choose those crops and livestock which utilize the natural resources of the farm to the best advantage.
4. They have the "know-how" and skills necessary to obtain efficient production from the crops and livestock kept on the farm.
5. They have ambition. Average yields are not good enough for them. They want to be superior farmers.

6. They have the desire and the ability to plan worthy production goals for the enterprises in the farm business. They realize that these goals are strong incentives to efficient production.
7. They appreciate a comfortable and attractive home and understand its effect on the happiness of the family.
8. They recognize the importance of an adequate supply of wholesome food for the family and have the "know-how" and means for providing it.
9. They are thrifty. Each year a portion of the farm income is spent to make the farm a more productive business and the home a more comfortable place in which to live.
10. They appreciate the community in which they live. They are always willing to join hands with others in obtaining educational and economic benefits for the community.
11. They have the ability to participate in community organizations. Standing before a group and discussing community problems is not embarrassing to them. Their knowledge of parliamentary procedure enables them to participate in business meetings.
12. They have the "know-how" and skills to maintain the buildings and equipment on the farm.
13. They have the ability to choose wisely and to buy advantageously the machinery and supplies necessary for operating the farm business.
14. They have the ability to market the products of the farm in such a manner as to obtain the maximum price.

Translate for Teaching Objectives

If you accept these qualities as those possessed by the proficient farmers of your community and if your aim in vocational education in agriculture is to train boys to become proficient farmers, then you have in these success factors the general outline for your course of study. These desirable qualities can be translated into your teaching objectives. For example, to develop a favorable attitude toward farming as a vocation, to develop the ability to choose crops and livestock which utilize the natural resources to the best advantage, to develop the knowhow and skills necessary to obtain efficient production from the crops and livestock kept on the farm, become your agricultural education objectives. These objectives become the foundation upon which the instructional program is built.

After you have prepared a list of these broad agricultural education objectives, then inventory the means that you have or can obtain that will help you attain these objectives. Such activities as supervised farming programs, classroom study, discussions and demonstrations, F.F.A. meetings and contests, and farm shop experiences are only means to an end. Each of these should make its maximum

contribution to the attainment of the educational objectives set up.

But you may ask the question, "How can I use these educational objectives?" I would suggest the following procedure:

1. Write each objective at the top of a sheet of paper.
2. Draw a vertical line, dividing the page into two sections.
3. Label the left-hand section "Subject Matter Needed." Label the right-hand section "Activities Needed."
4. Carefully select and outline the subject matter which will contribute most to the attainment of the objective in the section labeled "Subject Matter."
5. In the section labeled "Activities needed," list those activities such as supervised farming, F.F.A. activities, study and discussion, that offer the best means for attaining the educational objectives.

Detailing Instruction

If this procedure is carefully and conscientiously followed for each of the educational objectives set up, I believe you will have a sound outline of a course of study in vocational agriculture.

The next problem confronting you is what part of this over-all plan to include in the first, second, third and fourth years agriculture. In my humble opinion, each class should have an opportunity to select the content of their course under the guidance and direction of the teacher. Of course, this is difficult to do with the first year boys but there are psychological advantages in permitting the boys to feel that they have had a part in planning their course.

You must keep in mind that the attainment of your educational objectives may not come until after the boy has completed his high school education but each day's learning should lead him progressively toward the objectives.

There are certain problems and jobs such as (1) understanding the objectives of vocational agriculture, (2) understanding the purpose and organization of the Future Farmers of America, (3) choosing an adequate supervised farming program, (4) choosing worthy production goals for enterprises in the farming program that are common to the group. There may be several technical agriculture problems and jobs also common to the group. Certainly, these should be included and instruction scheduled at an appropriate time. However, a large part of the course should be based upon the problems and jobs confronting the individual boys in planning and carrying out their supervised farming programs. If a teacher has a thorough knowledge of his community and the boys enrolled in his class, he can anticipate these problems and jobs but he cannot make a definite determination until the supervised farming programs have been chosen. For this reason, supervised practice programs should be chosen prior to the beginning of the school term or very early afterwards.

It is through these activities that we

can best lead the boys to acquire the attitudes, appreciations, knowledge and skills that will help them become proficient farmers.

If you are looking for a step by step procedure for planning a course of study for all-day students, I would suggest the following:

1. Determine the factors associated with the successful farmers of your community.
2. Translate these factors into definite teaching objectives.
3. From the "fact" of subject matter and the numerous activities available to you, select those which are most effective in helping you to attain each objective. Record your selections for frequent reference.
4. With the help of the boys in each of your classes, prepare a course calendar, using your course of study as a guide. In the course

Adult Education Association

(Continued from Page 149)

Malcolm S. Knowles, Director of Adult Education, Central Y.M.C.A., Chicago, has been selected as the Administrative Coordinator of the Association and Director of the foundation project. He will serve full time in these capacities. Mr. Knowles has had a rich experience in adult education; he is author of the book, *Informal Adult Education*, which appeared in 1950; and he is well known nationally among many types of adult educators. His office will be in Chicago.

calendar, provide time for group and individual study and planning.

Just these few words in closing. For the sake of the boys who will be the farmers of tomorrow and for the sake of vocational agriculture, let's do some real planning for the years ahead. ●



Member of the Wesley Chapel F.F.A. chapter, North Carolina treating fence posts cut from his forestry project.



C.89 Veteran instructor E. C. Hughes (right) instructing trainee Eldridge H. Buck how to identify the disease Black Shank. (Flue-Cured tobacco;)

Secrets of . . . Profitable farm visits

WILLIAM H. KNIGHT, Teacher of Farm Veterans, Gaylord, Michigan

I WAS awkward and ill at ease when I made my first farm visit. It was a visit and that was all. It seemed to me that both the farmer and his son knew that I had nothing to leave them but my cordiality, and that was not enough to interrupt their busy routine. As I drove home that evening I dreaded the thoughts of spending a lifetime making farm visits of this sort. If I could leave the farmer with something to "chew on" each time, I felt that I would always be welcome and would go away with a feeling of personal satisfaction.

How could this be done? I queried several other beginning teachers. Some said, "Oh, I just make a short visit, not long enough to bother them." "I don't know how to go about it. I wish the state office would give something that we could use when we make a visit." "I don't make very many visits. I teach 'em enough in class—if they don't get it there, they aren't going to use it anyway."

Others, however, had concrete suggestions, and by using them and a few ideas that I have picked up as time has passed, I now enjoy my farm visits and feel a great deal of satisfaction in making them.

Most successful teachers of vocational agriculture, I believe, feel that the farm visit is the key to their success. It is the bridge between classroom instruction and actually putting techniques discussed in the classroom into practice.

Principles Basic to On-The-Farm Instruction

One principle is fundamental in making farm visits profitable; the person visited must be left with something pertinent to his own immediate situation. Whether it is a skill taught, a new technique demonstrated, or an idea, it must be important to the farmer at the time, otherwise it is likely to be forgotten.

This leads to a second principle; adequate planning. Not many of us are as adept at teaching as one teacher who excused himself from his visit with me to prepare his lesson. He said the class was due to meet in five minutes! Teaching in the classroom is theoretical and only when it is taken to the farm does it become practical. Most of us spend some time preparing our class discussion, as much or more time can be profitably used in preparation for a lively up-to-the-minute on-the-farm visit.

And finally a last principle; accurate records are essential. A lesson twice repeated may get less favorable response than a stale joke. Systematic instruction is as necessary on the farm as in the classroom; accurate records of on-the-farm instruction help to make it systematic for it makes planning easier.

Relate Farm Instruction to Classroom Teaching

But here we have been discussing principles of which most of us are

aware although perhaps a little careless of at times. Let's get to the real meat of the situation, the actual farm visit.

When we get to the farm the farmer, young farmer, veteran, day school student or whoever it is we are visiting is not ready for learning. He may be thinking of the burnt toast and cold coffee he had for breakfast, or of the swimming party he is going to miss with the gang because dad said the corn had to be cultivated today. A compliment or an exchange of small talk briefly may be all that is needed to divert the thinking from some unpleasantry to the problem upon which you wish to focus his attention.

One certain method of relating classroom instruction to the farm visit is by entering upon a discussion of a classroom topic that is pertinent to the student's situation. This will frequently lead to the teaching of a skill or an ability that could not have been done in the classroom. The instructor also has an opportunity to determine how effective his classroom methods are by the degree of interest and learning shown by the student's part in the discussion.

Using Filmstrips

In severe winter weather when the entire family spends much of its time in the farmhouse I have found an occasional filmstrip shown before the entire family adds much to the family's interest and appreciation of scientific agriculture. It is not infrequent that a practice is more readily accepted by the distaff side of the house than by the farmer or his son. I have found that this is one of the surest methods of getting approved practices adopted for the women have a very definite way of getting the men to follow their wishes—much as we hate to admit it. More agriculture is conducted in the barns and fields than in the living room—since our job is agricultural our most frequent place is not the overstuffed chair in the parlor. However, there are items which I label as "parlor topics"—farm accounts, financing, family relations, building and remodeling plans, and landscaping. These are a few topics which I have found successfully discussed within the house with the rest of the family present.

Look for New Problems Needing Instruction

Many teaching situations present themselves to the alert teacher in the barn. A farmer who was slow to accept new practices was "converted" when on walking through his barn I noticed a dry cow that obviously had mastitis. Often other abnormal conditions meet our trained eye when they are overlooked as normal or not even observed by the relatively untrained eye of the average farmer. By helping the farmer or farm boy recognize these abnormalities we are not only developing teaching situations, but we are inspiring confidence that will carry over to other phases of our program.

In the course of visits from farm to farm many labor-saving devices and short-cuts will be seen. These things can make one's visits profitable as they are shown to those who do not have them.

(Continued on Page 154)

The subsistence issue and establishment in farming with I. O. F. training

CEDRIC A. LAFLEY, Supervisor, Vermont



C. A. Lafley

THE veterans of World War II deserved recognition for the job they did. Little did they suspect the educational benefits which would be forthcoming. Indeed, few persons realized the extent that veterans would participate in such a program. We are now considering legislation that would extend similar benefits to veterans of our "police action" in Korea.

Are we, as educators, doing the best job possible for the money? Agricultural education never before had so much money for any program. The amount is amazing. Compare the over-all costs of the I.O.F. program with all federal appropriations for vocational agriculture since the year 1917! Leaders in agricultural education should not complain about the splendid opportunity for three lessons, in particular, come to mind from this experience.

Three Lessons of Value

First, we have more clearly seen the value of individual on-farm instruction in proportion to the time spent in other areas of work. This is of great significance, not only for us, but also for administrators with whom we work. This is a lesson of which agricultural educators are well aware. Steps are being taken to follow this up in the young adult farmer phases of the vocational agriculture program.

The second lesson learned is the true need which exists in the area of young farmer education. Teachers who have taught vocational agriculture in high schools and I.O.F. classes have expressed great satisfaction in having helped veterans become established in farming to a degree never possible in the regular program. As a result young and adult farmer education is coming to be thought of as a part of a total program in vocational agriculture and not just an extra activity.

The third lesson learned was from the practical-farm-instructors of the I.O.F. program, even though most were lacking in formal training. They taught us to delve further into areas of instruction than the vocational agriculture teachers ever thought necessary. The farm and home plan is but one example. Call this the problem method of teaching conducted in a down-to-earth manner!

That we in agricultural education, as well as the veterans, have profited by the I.O.F. program cannot be denied. But, we have had apparent failures in our

attempt to successfully establish veterans in farming. Ideally, we would like all veterans who participate in the I.O.F. program to remain established in farming. Yet, as time goes on and experiences are accumulated, we discover a number of failures.

A recent experience with a local I.O.F. Advisory Committee partially explains the point. The Advisory Committees are made up of prominent businessmen and farmers. It is reasonable to assume that they would act as impartially on I.O.F. applicants for training as did our local draft boards during the last war. They should be expected to carefully weigh all factors concerning each applicant as

ested. There was no evidence of his feeling dishonest in his demands. The advisory committee felt he needed a chance to promote his farming interests. Certainly, the instructor felt concerned as he knew the task of establishing this veteran as a farmer was nearly impossible.

Needless to say, these situations are not desirable from an educational standpoint. Instructors become confused. The advisory committees can judge whether requirements are met, but not so easily the intent for establishment. With subsistence adding to income, veterans in this group are naturally reluctant to stop training.

Most of us have abandoned dreams of riches—and so it is with the veterans. Making a decent living was uppermost in their minds when they returned from military service. Little did the veteran dream, while sitting in a fox-hole, that adjustment to civilian life was going to be a picnic. He was ready to try it, but somehow he lost a lot of that drive when offered such liberal terms. Try and



The milking herd of 17 head of cows owned by veteran Bill Higdon. Wayne Proffitt, teacher of agriculture, looking over the herd. (North Carolina)

justly as possible. In most cases they know the applicant personally as well as the farm on which he might be located. A veteran appeared before such a committee and asked to be considered as a transfer from a similar program in another state. His previous training had been in an entirely different farm enterprise from the one in which he wished training. He had made no financial gains towards establishment. He could show receipts of only \$156 for his year's work. He had learned to build fences and supplement his army retirement pay with other government funds, in the uninterrupted pursuit of his hobby—farming. He approached this particular advisory committee of well-meaning citizens with the attitude that the government had something for him that he was bound to obtain. He was not farming, nor did he intend to farm—just inter-

change it now and see what happens!

What then has the I.O.F. program accomplished for veterans? Two types of outcomes should be recognized.

1. It has provided educational benefits to those veterans who were intent on becoming established in farming as a way of life.
2. It has provided a reasonable living for those veterans who wished to supplement a meager farm income. True, those who are in this group also receive some educational benefits.

Wouldn't we have come out with the same number of veterans established in farming if we had based our aid on educational costs alone? This would have restricted training to those who were really interested in becoming estab-

(Continued on Page 154)

Farm placement opportunities*

HARRY T. MILLER, Teacher, Frederick, Maryland

This study was made in an attempt to determine the possible farm placement opportunities that may be available to the vocational agriculture graduates of the Fairfield High School, Fairfield, Pennsylvania. The very nature of vocational agriculture, that of being vocational, suggests the need of placement of many in farming upon graduation. All of the material was collected by personal interviews covering fifty farm operations.

Possible farm placement opportunities depend upon a number of intangible, as well as tangible, factors. Some of these factors could be measured or estimated with a reasonable amount of accuracy, others could not. This is usually true when you are dealing with people, however, the study did reveal some interesting problems.

Nature of Openings

One of the problems was the age at which a farm operator would be ready to step out of the ownership or position of operator and turn the farm operation over to a younger person. This change may come within a family, as father to son, or the renting of, management of, or the sale of the farm to or by another individual. There were 15 operators in the area over the age of 60 years. These are all possible placement opportunities, but how soon any or all of these will develop into openings is difficult to say, but they are potential openings in the future.

The other type of possible openings will result from the expansion of the present farm operations to increase the need for more help in the form of part-time hired hands, full-time hired hands, and operators to farm on share, rent, or to work for a salary. There were 37 farm operations in the area that could expand to a point of needing additional help from $\frac{1}{4}$ man to 2 full-time men to an operator (Table 1). The restrictions on expansion in order of most frequent occurrence were: additional land, labor, building space, and capital (Table 2). Several farms had no significant restrictions on expansion.

TABLE 1—Expansion of Farm Operations

	Number of Farms	Per Cent of Farms
Could expand	37	74
Could not expand	13	26
Total	50	100

Most of the farms contacted could expand if one or more restrictions were corrected. Some of the factors on certain farms could readily be corrected, while others would be difficult.

Ten of the possible openings due to

*Maryland Vo-Ag News, Fall 1951.

TABLE 2—Restrictions on Expansion

Restrictions	Number of Farms	Per Cent of Farms
Land	22	44
Help	14	28
Building Space	10	20
Capital	4	8
None	10	20

aged operators occurred also in the possible openings due to expansion. There was a total of forty-two potential placement opportunities from the fifty operations surveyed. Sixteen would offer placement of part-time hired hands of one-half year or less, seventeen as full-time hired hands, and four as operators. It was estimated that among these opportunities, there were about 25 worthwhile placement opportunities or about one-half of those that were surveyed.

TABLE 3—Boys' Willingness to Accept Placement

Type of Opening	Number Open	Boys Willing
Part-time hand	16	3
Full-time hand (good living conditions)	9	5
Full-time hand (fair living conditions)	2	3
Full-time hand (poor living conditions)	6	1
Operator—salary	1	15
Operator—share or rent	3	11

There was, on the other hand, a potential demand for placement for about 15 boys annually. The class of 15 vocational agriculture students were used to determine the willingness of the boys to accept the opportunities available. Few were willing to accept part-time placement; one-third were willing to accept opportunities where a full time hired hand was needed and farm and living conditions were rated as "good" or better; placement as operators was acceptable to at least 50%; and placement as a paid operator was acceptable to all boys (Table 3).

The subsistence issue

(Continued from Page 153)

lished in farming. It would have kept educational standards high.

In future programs educational opportunity should stand or fall on its own merits. Wars are not going to be fewer, nor veterans any different. Physiological drives are essential to the preservation of the individual or a nation, so let's not mislead ourselves into setting up temporary solutions to making a living. Rather, let's work with those who are serious in their desire to become established in farming, and who see education as a means to the end.

Secrets of profitable farm visits

(Continued from Page 152)

Farm safety is an important topic for the farm visit. So that no one feels that he is being picked on, I have made a practice of designating a specific month as "farm safety month." In that month all of my visits will include some time spent in helping the individual student find hazards to life and limb. Improvements come more readily if the instructor stands in the background and guides the student to "finding" the hazard rather than pointing out each item.

A trip through the fields and gardens of a farm often reveals such teaching situations as methods of recognizing and controlling insect injury and diseases, new crop varieties, conservation practices, fertilization which will lead to soil testing, identification and methods of control of weeds, and planning rotations and improved land use. The use of a demonstration plot will often "sell" a farmer on a new practice which he hesitates to adopt on a large scale until he sees its usefulness demonstrated.

Gain Their Confidence By Doing Some Farm Work

Back at college there was an oft repeated warning to beware of "service jobs"—letting the farmer get you to help him do some job that required no more than ordinary skill. In other words you became a hired hand for a short time. But one day I was told of another's experience who overheard one farmer say to another, "You know why that fellow is teaching agriculture? He's too lazy or doesn't have the ability to do the kind of jobs 'us farmers' have to do." Right then and there I forgot all the words of wisdom I'd heard about "service jobs" and I went out and got one. My muscles weren't as tough or my hands as calloused as fifteen years before when I was a boy on the farm, but I was determined to show the skeptics that an agricultural teacher is not only a teacher of "kids" but also a practical down-to-earth fellow who can do just as good a job of plowing or building a load of hay as any other farmer. The story doesn't end with the notation that an agricultural teacher was hired out as a farm hand. No, but the farmer who had the impression that agricultural teachers were bookish fellows with no farming ability, came to the conclusion that, "maybe he better listen to a little of this 'brainy stuff'—might make brawn go a little farther!"

Teacher Satisfaction

On every farm no matter how poorly operated there is at least one bright point. If, during the visit, it is necessary to be harsh and critical, as may infrequently be the case, it always leaves a good feeling if, as one is about to leave, one good point may be mentioned and a word of commendation given.

With the farm visit over, I like to reflect on what was accomplished. How good was the visit? How can the next one be made more profitable? The more profitable the farm visits, the more satisfying the job of teaching.

A study of the occupational status of state farmer degree members in Kansas*

FRANK R. CARPENTER, Teacher, Beloit, Kansas

A RECENT survey of the occupational status of State Farmers in Kansas showed that 62.6 per cent of the 784 State Farmer degree members who reported were farming full-time. Seven and two-tenths per cent were farming part-time, making a total of 69.8 per cent engaged in farming either full-time or part-time.

The study included all those who had received the State Farmer degree from 1929 to 1950. Responses were received from 80.1 per cent of those who were contacted.

The twenty year period 1931-50 was divided into five year groups in order to determine whether the depression and the drought and later, World War II had any effect upon the percentage of State Farmers who entered the occupation of farming. The years 1929 and 1930 were not used in the comparisons because of the small number and percentages of replies received from members who obtained their degrees during those two years.

State Farmers tended to become established in farming in increasing percentages while the farm population and the number of farms in Kansas decreased from 1930 to 1945. Fifty-three and four-tenths per cent of the State Farmers who received degrees from 1931-35 and 52.3 per cent of the 1936-40 group were farming full-time. Sixty-eight and seven tenths per cent of the 1941-45 group and 64.3 per cent of the 1946-50 group were farming full-time.

Procedure Used in Study

The information for this study was secured by means of questionnaires which were sent to all F.F.A. members, except those in military service, who had been awarded the State Farmer degree by the Kansas Association of F.F.A. during the twenty-two years that the degree had been awarded in Kansas.

Each local F.F.A. chapter in Kansas having one or more State Farmer degree members was mailed a list of the names of members who had received the State Farmer degree and the local F.F.A. adviser was asked to supply the correct current addresses for same. Each local F.F.A. adviser was also asked to write a "type" letter addressed to the State Farmer members of his chapter asking their cooperation in supplying the information requested.

Just prior to the time the lists of State Farmer names were mailed to the chapters, the State Supervisor of agricultural education wrote a letter to all the teachers asking for their cooperation in securing correct addresses of State Farmer degree members.

*Based on Master's Thesis, Kansas State College, 1951.

The questionnaire included six major headings as follows:

Part I—Name, high school attended, family status and college attended.

Part II—For those who were farming—present positions, types of farming, and sizes of farms.

Part III—For those who were not farming—present occupation, position in that occupation, and previous occupation.

Part IV—Community activities—membership, offices held in local organizations.

Part V—Two questions concerning opinions held: (1) the value of the all-day program of vocational agriculture in Kansas and (2) the value of the part-time vocational agriculture program.

Part VI—Comments.

The study was based upon the 784 usable questionnaires that were returned by the State Farmer degree members.

Establishment in Farming

State Farmer degree members who were on farms were farming in many different capacities ranging all the way from hired men to owners. The groups were compared by five year intervals. It was found that State Farmers were becoming established in the farm business as owners as time allowed them to accumulate financial resources.

Of those who received State Farmer degrees in 1946-50, 5.5 per cent were on farms as hired men, those who received degrees during the first ten years of the period studied reported no one working as hired men. In the "owner" and "own part, rent part" categories there were definite and continuous rises in percentages from 1946-50 to 1931-35.

Very few State Farmers were farming less than one hundred acres. The largest percentages fell within the 301 to 1200 acres range, with the largest single percentage lying within the 601-1200 acres range.

The State Farmers who had been out of high school 15 to 20 years tended to farm more land than did those who had been out only one to five years. In the 1931-35 year group 23.7 per cent were farming acreages between 600 and 1200. While in the 1946-50 group only 18.3 per cent were farming in this acreage range. This showed that the younger farmers were also farming comparatively large acreages, but as has been pointed out previously, the younger men were farming to a larger extent as renters, partners and hired men, while more of the older men were farming in the capacity of full owners or part owners.

College Attendance

Fifty and one-tenth per cent of the State Farmer degree members had attended college. Thirty-seven and two tenths per cent had attended agricultural colleges.

The percentage of college attendance by five-year groups fluctuated over the twenty year period, World War II undoubtedly influenced the percentages of State Farmer degree members who attended college. Some of the State Farmers who received their degrees between 1936-40 had their college training interrupted by the national emergency—others not enrolled in college went to war, then returned and attended college under the GI Bill. The drought and depression apparently had little effect upon college attendance by State Farmer degree members.

Of the 393 State Farmer degree members who had attended colleges, 62.8 per cent had enrolled in the school of agriculture, 19.3 per cent in the school of arts and sciences, 9.3 per cent in Engineering and Architecture, 4.8 per cent in Veterinary Medicine, 1.5 per cent in Medicine, 0.3 per cent in Law, and 2.0 per cent in Theology.

Nearly all State Farmers were engaged in one or more community activities. The largest total percentage (32.4) reported taking part in two community activities. The term community activity included church, civic clubs, farm bureau and other organizations which include in their objectives the improvement of society.

State Farmer degree members were asked to express their opinions as to whether the program of vocational agriculture as carried on in Kansas high schools was justified. Ninety-six and seven-tenths per cent said that the program was justified. Within the groups the percentages that answered "yes" increased from 95.5 in the 1946-50 group to 100.0 per cent in the 1931-35 group.

State Farmer degree members were also asked to give their opinions as to whether the vocational agriculture departments in Kansas should offer out-of-school young farmer educational programs. Sixty-seven and two-tenths per cent favored such a program.

Decision making

(Continued from Page 147)

None of us admits to infallibility. Decisions which we make should be evaluated systematically even though we are thoroughly conscientious in reaching them. In many cases there is little that may be done to correct the first error of decision, but evaluation may help in reducing the number and range of future errors.

Decide now to work for continuous improvement in *Decision Making*. It is a vital function and worthy of the striving.

The United Nations employs 3,000 people in its headquarters, and is counted the world's largest employer of linguists.



Young Farmers from eleven states met in Salt Lake City, Utah for a one-day Leadership Conference. The Utah Young Farmer Association acted as host to the conference. About one hundred Young Farmers and advisers from California, Arkansas, Oklahoma, Oregon, Nevada, Nebraska, Colorado, South Carolina, Virginia, Ohio and Utah participated.

Vocational education and the individual

RAYMOND M. CLARK, Teacher Education, Michigan State College



R. M. Clark

IN OUR society we expect individuals to make a contribution leading to its improvement. We expect individuals to be able to make a contribution and to earn a living through their efforts in the home, on the farm, in business or in industry. Good citizenship is expected; participation in government through intelligent voting and performance of other activities is a manifestation of good citizenship.

Society has assigned to its system of education the responsibility for assisting individuals to prepare themselves for the discharge of the duties imposed upon them by the society. Unfortunately, as our educational system has developed, it has become compartmentalized to such an extent that even the students tend to think of one portion of their education as "general" and an entirely separate portion as "vocational." Actually it is the individual who is being educated, and changes in the individual should be the chief concern of the teacher. A recognition that each compartment in our educational pattern makes a contribution and that these must be blended in the individual is essential for a sound educational program.

Vocational education helps to round out the education of the individual by helping him to: (1) develop vocational

skills; (2) develop the ability and understanding necessary for functioning of the individual in the business or industry of which he is a part; (3) develop an understanding and appreciation of the responsibility to society which an individual assumes by virtue of his vocation; and, (4) adjust to school or to other situations in which he may be receiving his training.

The development of vocational skill.

Vocational education provides training for occupations such as farming, lathe operation, or typing. It provides specific training for the occupation, including training in the use of materials and machines common to the industry. An understanding of the principles and practices required in the industry for satisfactory performance is developed.

By way of illustration, a young man who is enrolled in a program of vocational education in agriculture may learn to properly fertilize new seedlings on his farm. At the same time he will learn enough of the principles involved in the science of plant nutrition so that he will be able to adapt fertilizer practices to new conditions and to new situations. The student who is learning to operate an industrial machine will learn the necessary mathematics, as well as the skills required in the operation, so that he can turn out products within the tolerances required in the operation.

A highly industrialized society such as ours, requires highly trained workers, skilled in the operations and techniques necessary for the mass production of goods and the performance of services required in the society. They must be

acquainted with the scientific and technological bases for the work they are performing. The skills required of workers in a business or industry are constantly changing. Workers must be constantly alert to the impacts of new inventions, of new techniques, and of new materials on their jobs. Each of these changes presents a challenge to the individual to retrain himself for the new situation; each presents a challenge to educators to revamp the training program to meet the new demands for training.

In the field of agriculture, farmers have adjusted their methods of operation to take advantage of many new developments which have appeared in the last fifteen to twenty-five years. Industrial workers have found it necessary to adapt themselves to technological developments such as the use of plastic materials to replace other fabrics, or the development of automatic machines to replace hand labor in the factory. These changes, and many others which might be reviewed, serve to illustrate the responsibility placed upon workers, and vocational educators alike, for the constant evaluation of training in the light of the demands of the industry for which training is being offered.

The development necessary for the functioning of the individual in the business or industry of which he is a part.

The development of the ability of the individual to function intelligently as a member of the group with which he is working is a second contribution which vocational education makes to the individual.

In industry this contribution includes the development of abilities of workers to function as members of their labor unions, and the ability of workers to function in relation to their supervisors and foremen. In agriculture, the functioning of the farmer in his farm organization and with his neighbors is involved.

In vocational education, experiences are provided which enable the student to develop abilities along these lines. High school boys who are members of



the Future Farmers of America learn to organize and conduct their own programs patterned after many of the adult farmer organizations. They learn to conduct their business according to established principles. They learn to recognize the problems of relationship existing in their vocation. In business and in industrial education, trainees study problems of economics related to their work. They learn to assume their share of responsibility for the proper functioning of the organization in which they are operating.

The development of an understanding and appreciation of responsibility to society.

A third contribution of vocational education to the individual is the development of a concept of the responsibility to society which an individual assumes when he enters a vocation. The farmer cannot be the best farmer unless he appreciates the social effect of his efforts as a farmer. He must understand the far-reaching effect of the quality of the products he places on the market. Similarly, the industrial worker needs to understand and appreciate the effect of his efforts on the consumers of the products he helps to produce.

The creation of a safe product is the responsibility of every worker. Food store workers should assume responsibility for the sanitary handling of foods. The automobile mechanic has a responsibility for turning out repair work on an automobile so that it will be safe to operate on the highway.

Vocational education has the job of developing, in each individual, concepts which will result, not only in skilled operations, but also in an appreciation and understanding of their obligation to society for the production of a satisfactory product.

The assistance given for the adjustment of individuals.

Vocational education makes a fourth contribution to the development of individuals. When an individual enters into a vocational training program in which he is genuinely interested, much of his academic work takes on new

Veterans teach safety

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L. B. Fidler

FARM safety is a definite phase of vocational agriculture teaching in Ohio. It is probably because of this fact that the Ohio Veterans Institutional On-Farm classes were asked by the Ohio Fire Safety Committee to co-sponsor a fire prevention project. There

was a precedent for such a proposal since the regular vocational agriculture classes had just completed one year's work on a corn picker safety campaign with outstanding success.

The proposal to assist with the fire prevention project was presented to the veterans' teachers at the 1950 annual conference. After some discussion the suggestion was wholeheartedly accepted and a committee of teachers appointed to help draw up plans for the actual presentation which was to be made during

meaning. The need for a knowledge of much of the English, mathematics, economics, and other subject matter becomes apparent and the restlessness, which is common in so many young people, begins to disappear. School takes on new purpose and the student is able to go ahead with new enthusiasm.

Vocational education, many times, assumes this additional responsibility, to guide the individual to acquire a well-rounded education through the needs discovered in the vocational aspects of his training. It is not enough to have skilled production workers; they must also possess skills of democratic citizenship.

national Fire Prevention Week October 8-14, 1950.

It was decided that the emphasis should be on preventing fires caused by kindling with kerosene. Experience of members of the committee definitely pointed to the need for a visual form of teaching. After further discussion it was decided that a film-strip should be produced dealing with the hazards of kindling fires with kerosene.

The State Fire Marshal volunteered to pay for the cost of producing the film-strip and members of the state Fire Safety Committee planned the strip using local pictures on hand supplemented by some special staged photographs. The film-strip consisted of 38 frames and was titled "Kerosene Kindling Kills." Five hundred copies of the film-strip were produced to be placed in the hands of veterans' teachers.

Previous to this the selected committee of teachers had planned a suggested procedure to be followed in the various counties to insure the widest possible publicity and showing of the film strip to the various rural groups. The plan provided that actual showings be made by selected teams of veterans. The state office assumed responsibility for distribution of the film strips and for collecting and tabulating data as to the success of the project. The film-strips were eventually to become the property of the local school for future use.

That the veterans entered into the project wholeheartedly is shown by the fact that 268 teachers reported that over twenty-three thousand people had viewed the film in 487 different meetings. Twenty-six different types of rural organizations participated. Some reports are still coming to the state office indicating that well over twenty-five thousand persons will see the film.

There were many comments made by the teachers indicating that the project was well received. The following are typical.

"Very few realized the explosive power of kerosene."

"We had several local examples of people that were crippled or killed by kerosene."

Improving supervised farming...

How recent research may help us

GEORGE P. DEYOE, Teacher Education, University of Illinois



G. P. Deyoe

ARE WE using the results of research to help us do a better job in supervised farming with in-school and out-of-school groups in vocational agriculture? Or, are some of us like a farmer who lived within a stone's throw of some experiments which clearly dem-

onstrated effective methods for improving pastures, but failed to do anything about his own low-yielding grassland?

In vocational agriculture, a large number of valuable research studies have been completed. These studies have not been used to the extent that the findings merit. Among these studies, there are many related to supervised farming which are worthy of our attention.

What are some of the important findings of recent research studies in supervised farming? What do these studies reveal that should be helpful to teachers of vocational agriculture and others in this field? This article represents an attempt to analyze, summarize, and interpret the findings from recent studies of supervised farming. Most of these studies are reported in the Supplement No. 3 and Supplement No. 4, *Summaries of Studies in Agricultural Education*, published by the U. S. Office of Education, or are included in summaries prepared for Supplement No. 5 to be published in the future. Some of the studies are reported in articles in *Agricultural Education Magazine*. A few of the studies here considered were available to the writer from other sources.

Trends in Supervised Farming

A look at the findings of recent studies of over-all trends in supervised farming shows in general that these programs are increasing in breadth, but not as rapidly as most persons would agree is desirable. A study by Phipps (53) of the long-time trends in Illinois shows a shift toward programs with a preponderance of ownership projects in livestock, with crops given considerably less attention than their importance seems to merit. Programs of this kind are not well balanced in terms of the kind of farming which they should represent. Perhaps the solution in many of these situations is to increase the crop projects, without decreasing the livestock phases, and to add improvement projects and supplementary farm jobs.

Wildemuth (73) found in Iowa a small but significant increase over a period of years in the number of projects (presumably of the ownership type) completed per student. Findings in Massachusetts by Taft (68) indicate a trend toward providing experiences through

placement programs, with decreases in the ownership phases. He believes this trend is undesirable and recommends a shift to more ownership and improvement projects.

While some studies show that in many departments increased attention is being given to broadened programs through the addition of improvement projects and supplementary farm jobs, expansion in these activities has been slow and "spotty." An encouraging feature, in most states, is that the number of departments is increasing in which broadened, well-balanced programs are being developed.

There has been little or no research on the nature and trends of supervised farming programs for out-of-school groups. However, some studies reported later in this article show the characteristics of programs for farmers in the institutional on-farm program for veterans. These have implications for other out-of-school groups.

Practices in Initiating and Developing Programs of Supervised Farming

Four recent studies have been completed in which specific practices were identified which contribute to securing good programs of supervised farming with all-day students. These studies were

guide students to develop written plans for farming programs; (h) guide students and parents to develop definite business agreements, preferably written; (i) hold group meetings with parents to discuss supervised farming; (j) base instruction throughout the year on problems related to supervised farming; (k) make farm visits throughout the year to provide on-the-farm instruction in developing these programs; and (l) familiarize local school administrators with the purposes of supervised farming.

Phipps (53) reported various methods used by teachers to develop interest in supervised farming. These include: (a) Opportunities for profit, (b) opportunities for learning, (c) showing at fairs, (d) conducting field trips and tours, (e) reviewing accomplishments, (f) relating to advancement in F.F.A., and (g) using photos, grades, and publicity.

Shaw (57) studied methods for securing parental cooperation, with special attention to conducting, with parents, a series of meetings on supervised farming and related matters.

Shelly (58) analyzed the kinds of information, from home-farm surveys, considered valuable by teachers in guiding boys to select programs of supervised farming. This information includes personal and family information about the boy, facilities available for supervised farming, a survey of enterprises and equipment on the home farm, and information on some of the practices used on the home farm.

Griffith (29) studied personal relationships between boys and their fathers,

What do studies show?

This contribution is one in a series of twelve planned for the current volume. Each will review and interpret studies in a phase of the program in agricultural education. Each will provide the reader with an overview of the research and point up applications in a particular phase. The phases to be covered and the selection of possible contributors were planned with the A.V.A. Research Committee for Agriculture.

completed by Abrams (1), Deems (11), Deyoe (13), and Garner (28). Some of the practices which appear to be most significant, as revealed by one or more of these studies, are: (a) Provide pre-enrollment guidance and counseling for prospective students, with consideration given to possibilities for satisfactory supervised farming; (b) provide class instruction early in the first year which aids in the selection and initiation of programs; (c) make visits to farms of students early in the school year to discuss, with students and parents, the selection of supervised farming; (d) use various methods such as setting goals, developing feeling of need, taking tours and field trips, and providing for recognition) which develop interest in supervised farming and motivate the selection and initiation of good programs; (e) utilize appropriate activities of the F.F.A. chapter which aid in starting good programs; (f) hold conferences with individual students to guide them in selecting programs; (g)

and Hull (38) analyzed father-son agreements. The former concludes that increased attention should be given to developing good relationships through encouraging father-son conferences on important farm matters and on the boy's problems, providing opportunities for the boy to learn complicated farm jobs, and giving the son increased responsibility and financial interest. Hull found that a majority of students had written business agreements and that a large percentage favored such agreements; he emphasized the need for developing improved types of agreements.

Through studies by Knight (43), Nesman (51), and Sweany (62), a start has been made in analyzing the activities, needs, and resources on small-scale, part-time farms with implications for adapting supervised farming to these situations. From an analysis of these kinds of situations, the need is apparent for developing activities of supervised farming related to such phases as producing and conserving the family food

supply, improving the home and its surroundings, improving the soil, and raising crops and livestock adapted to this type of farming.

Relation of Supervised Farming to Establishment in Farming

A study by Shontz (59) revealed some of the opinions of former students now farming on how supervised farming might be improved. He found many indications from these persons that supervised farming aided them in getting started in farming, particularly in starting enterprises dominant in later farming. There appeared to be a need for more attention to setting goals, making long-time plans, and developing partnerships. Wald (69), in a study of ways by which all-day students became established in farming, found that many of them indicated supervised farming as a factor. Another important factor was partnerships with the fathers, which were usually in conjunction with the supervised farming programs.

Angerer (4) found it highly desirable to encourage the development of programs of supervised farming which are geared to the farming of the community and the individual farms. Most young men, who farm, become established in the home community or a type of farming area similar to the home farm. While enthusiastic teachers were able to secure the adoption of enterprises of little importance in the community, many of these enterprises were dropped by the young men after they engaged in farming for themselves. The implications seem obvious for guiding students to make wise selections of their programs while in school. Young men who went directly into farming after leaving high school were the ones with the most comprehensive programs of supervised farming. Watson (71) found a similar situation, with the exception that many boys with the most comprehensive programs entered a college.

Swecker (67) studied the progress of farmer veterans toward establishment in farming in West Virginia and found that the training program aided considerably in advancement in status, increasing the size of business, and improving the farming methods. Harris (32) also found this to be the case in Virginia.

In a study of how farmers became established in Indiana, Sweany (63) recommends that, wherever possible, supervised farming programs should be developed which enable the young man to stay at home and earn a satisfactory income. He also suggests that placement for farm experience should be used in some cases for providing broadened experiences in farming.

From these studies, it appears that supervised farming conducted by in-school and out-of-school groups does contribute to establishment, although to be most effective many of these programs need to be improved.

Setting Goals, Determining Effective Procedures for Related Instruction, and Evaluating Outcomes in Supervised Farming

The use of measures of efficiency as a basis for setting goals and evaluating

stated in terms of levels of production, progress has been reported in several recent studies. A few years ago, Deyoe (14) emphasized the place of goals and standards in developing programs of supervised farming. He suggested goals or measures of efficiency, coupled with the use of appropriate standards based on actual accomplishments of similar groups of students. Since then, he developed standards of a "scaled" type for use as guides in setting goals and evaluating accomplishments in swine projects (15). Sweany (64, 65, 66) also summarized, in a similar manner, data for swine, dairy, and beef enterprises. Hoover and Brunner (34) developed many suggestions for production goals and standards for each kind of livestock project; these were based primarily on judgments of teachers. Several studies (18, 33, 36, 37) show the effective use of measures of efficiency with specific groups of youth and adults. It seems well to emphasize that measures of the type indicated above are important to the degree that they reflect the development of educational objectives in the form of abilities needed for the successful production of livestock and crops. The use of these measures appears to constitute a strong motivating force in securing the adoption of approved practices which contribute to the desired result.

Knuti (44) made an extensive study of the place of objectives in the learning process and tried out various techniques which involved the learners in formulating objectives and evaluating progress. He found students, both youth and adult, interested in formulating their objectives, determining the learning processes involved, and appraising progress. Much of this study has implications for supervised farming.

Several studies (7, 8, 22, 23, 24, 25, 35, 39, 41, 52, 54, 60, 67, 70, 72) have been made which reveal the extent to which approved practices in farming have been adopted in the development of farming programs. Most of these have been made in connection with the institutional on-farm program for farmer veterans. In general, these studies reveal that, for these groups, many practices have been adopted or improved, particularly in the production phases of farming. Some of the studies have revealed changes in broader phases, such as soil conservation, size of business, farming status, participation in farm organization, income, farm living, and leadership. However, in a few cases, improvements in some of these latter phases were found to be less favorable than in the livestock and crop enterprises.

Agan (2), Donahoo (17), and Gruenwald (30) made intensive studies of the adoption of practices in swine, soils, and crops, respectively. Comparisons of veterans in training with veterans not in training showed a distinct advantage in favor of groups in training. Also, the veterans who had attended young-farmer and adult courses carried out practices to a greater extent than those who had not attended such courses. There was no significant difference in practices between veterans who had taken vocational agriculture in high school and those who had not taken vocational agriculture. Mc-

Kimpson (49), in a similar type of study with beef and dairy cattle, found significant differences, between veterans in training and veterans not receiving instruction, in only about 14 per cent of the practices.

Meaders (47), in a study of the effects of vocational agriculture on changes in community practices in corn production, found but little average difference between individuals with different training. However, he did find highly significant differences between some schools, and classes with veterans and young farmers were more effective than high school classes in bringing about changed practices.

Dunlap (21) studied methods used in marketing products from supervised farming programs of high school students. He also determined what might be done to improve marketing of these products through giving increased attention to consumer demands, considering seasonal price variations, and marketing by group action.

Balser (5), McJunkin (48), and Ruble (55), studied methods effective in the adoption of approved practices. Balser found considerable promise in the "trial-acre" approach for securing the adoption of approved practices in corn production. This involved the use of new practices by farmer veterans on trial plots on their farms, with a check on comparative yields between these areas and other portions of the same fields. For the production practices which proved effective, expanded use was made in the year following. McJunkin noted similar results from high school students where emphasis was placed on setting production goals, studying how to reach these goals, and evaluating outcomes. In both studies, the groups were provided with carefully prepared materials on recent research findings in corn production. As additional outcomes of these methods, the persons developed clearer understandings of the practices used. Ruble determined the methods considered effective by teachers in securing the adoption of approved practices. These included (a) teaching approved practices as a definite part of each unit of instruction, (b) developing abilities and skills for applying practices, (c) home-farm visits with emphasis on practices, (d) incorporating approved practices in project plans, and (e) studying the relation of approved practices to increased income.

In a study of the farmer veteran program in Wisconsin, Cooper (10) identified teaching methods and procedures associated with outcomes in terms of approved practices, increased levels of production, increased net worth, and increased labor income. Methods used more frequently by teachers whose trainees rated higher in these outcomes than by those who rated low included: (a) Establishing specific production goals with trainees; (b) planning individual instruction with trainees on the basis of their needs; (c) making long-time plans for group instruction; (d) teaching in terms of problems of the group; (e) providing trainee responsibilities in class sessions; (f) using field trips, tours, and pilot demonstrations to

show value of practices; (g) helping trainees with personal problems; (h) basing on-farm instruction on needs of individual trainees; (i) using demonstrations in teaching; (j) evaluating by noting practices adopted and analyzing the farm business annually; (k) scheduling cooperatively with trainees the visits for individual instruction; and (l) training veterans to participate in group activities and use agencies in the community. Lintner (45) found that the methods of most value in teaching farmer veterans were discussion and demonstration.

A study made several years ago in 400 departments of vocational agriculture in the United States involved the use of criteria for evaluating various phases of the program. From the data collected, descriptive scales were recently constructed (3) which are helpful to teachers in making qualitative evaluations of supervised farming, as well as other parts of the local program.

While measures of efficiency and the adoption of approved practices have been used extensively as criteria for evaluating supervised farming, there also has been a definite trend toward a broadened approach to the evaluation of the outcomes of supervised farming. This involves the careful statement of objectives, selection of kinds of evidences that indicate the degree to which objectives are being realized, and development and refinement of techniques for collecting evidence (12, 22, 27, 31, 61, 72). In most of these studies, emphasis was placed on objectives of an educational type stated in terms of abilities important in farming and farm living. To evaluate outcomes of these types, several kinds of evidences are needed. These include financial progress, approved practices adopted, changes in farm organization, use of measures of efficiency, and improvements in level of living.

Using School-Land Types of Group Projects

School land as a type of group project has been given considerable attention in some places. Three recent studies indicate some of the purposes, advantages, disadvantages, methods of management, and other aspects of these undertakings (16, 40, 42). Opinions regarding the value of these operations were found to vary considerably in the states included in the studies. Two types of school-land projects seem to prevail, namely, large farm layouts and small plots of a few acres or less of a "land-laboratory" type; the latter are more numerous.

While purposes seem to differ, school land is used primarily to demonstrate desirable practices and to provide experiences for students. Just how effective they are for the former, as compared to demonstrations on regular farms, has not been fully determined. The experiences provided on school land frequently duplicate those available to typical farm boys. In one study, it was found that managerial decisions are usually made by the teacher. There seems to be considerable agreement that these facilities are not satisfactory substitutes for individual programs of supervised farming on the home farms of students. (Boys

who do not live on farms are not likely to farm anyhow.) In one of these studies, it was noted that in departments which once operated large layouts of school land there was a tendency to greatly modify the type of operation or withdraw from them entirely after a few years, probably due to the large amount of teacher time required. While there are many examples of the successful operation of school land, in none of the studies was it recommended that these kind of activities be adopted generally.

Schoonover (56) studied various types of group projects, many of which provided for cooperative buying and selling. Some of these involved the use of school land. He emphasized that participation in a group project should not be substituted for the individual supervised farming programs.

Improving Records for Supervised Farming

The kinds of records to keep, how to improve them, and how to use them effectively are recurring problems.

Beeghly (6) studied the weaknesses in the record book used in one state and made suggestions for improving it. He found a need for securing more data helpful in the analysis of records. William (74) studied record books from several states and secured reactions from teachers who tried out various kinds of records. Zimmerman (75) analyzed project record books and revealed a need for record books designed for broadened programs. Dunkelberger (20) developed an improved system of records which was tried out and revised. He concluded that space should be provided for several productive enterprise projects and for recording improvement projects and supplementary farm practices. He suggested a loose-leaf design to provide for flexibility. Fox (26) studied methods of budgeting and designed a manual for this purpose.

Considerable attention has been given to the analysis and use of records of production as well as financial records. Some of these studies were mentioned earlier in this report. Duck (18) has worked with teachers in Missouri helping them to summarize, analyze, and interpret records with their students. Dugdale (19) provided techniques for analyzing and using production records in dairying. Such approaches are serving to highlight inaccuracies which commonly occur in records and no doubt are helping to focus attention of teachers and students on the need for more accurate records, as well as on techniques for summarizing, analyzing, and using the results.

Improving Farm Visits

Mumfre (50) made an analysis of 15 major enterprises represented in supervised farming and noted the crucial periods for visitation. He found that many of these periods occur during the early development of an enterprise. Cook (9) made a similar analysis for swine. Both of these studies imply the need for the careful planning and scheduling of farm visits so that many of them are taken at crucial times in the

supervised farming programs, and thus the visits provide maximum opportunities for effective instruction. Martin (46) reported the time spent by teachers, in the North Atlantic States, in making farm visits. Those who reported spent yearly per student an average of 1.6 days (based on an eight-hour day). Using teacher recommendations, he proposed a standard of 2.5 days per year per student for this purpose.

Summary

There is considerable evidence that programs of supervised farming for high school students are slowly improving in breadth, with some departments far ahead of others. In general, much remains to be done to improve these programs so that they will contribute most effectively to the educational objectives commonly accepted for vocational agriculture. While considerable research has been done on the nature and trends of supervised farming programs for all-day students, more research is needed on the nature and trends of these programs for out-of-school groups.

Considerable progress has been made in identifying and refining techniques and practices helpful in securing broadened programs of supervised farming with all-day students. Teachers would do well to utilize more of these findings.

Some studies have indicated the needs in small-scale and part-time farming, with implications for supervised farming.

Studies show that in many cases supervised farming programs are contributing to establishment in farming. However, increased attention should be given to selecting and planning programs which are even more effective in reaching this objective.

The development of appropriate goals and objectives, together with effective evaluation, may aid materially in improving the programs of supervised farming. A trend toward a broadened type of evaluation is noted, with consideration given to several kinds of evidences which indicate progress toward desired goals and objectives. Evaluation has been widely used to determine past accomplishments of various groups in vocational agriculture. Increasingly, these techniques should be utilized in individual departments for periodic appraisals to determine strengths and weaknesses, and these findings should be used to aid in the progressive improvement of supervised farming.

Some progress has been made in identifying methods which contribute to the adoption of approved practices and to other desirable types of outcomes in the farming programs. Further studies of this kind are needed.

School land, or land laboratories, and other types of group projects have been studied with some analysis of advantages and disadvantages of these undertakings. While land laboratories appear to have certain merits under some conditions, there is little evidence that they are essential to a good program in agricultural education. Broad individual programs of high quality on home farms appear to be basic to sound education in vocational agriculture.

A few studies have been made on the improvement of records for supervised farming, and methods of summarizing, analyzing, and using the results.

A start has been made in determining the crucial periods in the development of farming programs and the implications of these periods for improving the timing and nature of farm visits. The time spent by teachers for farm visits seems inadequate in many cases. In improving this situation, possibilities to be considered include setting minimum time standards and recognizing visitation as a definite part of the teacher load.

Several of these studies indicate that instruction with out-of-school groups is more effective than with all-day classes in bringing about changes in farming practices. This tends to highlight the importance of providing instruction for relatively mature persons in farming who have progressed to the stage where they have the responsibility necessary for carrying many phases of instruction to the action stages.

In general, recent studies have provided many suggestions helpful in improving programs of supervised farming. Teachers would do well to consider these findings and apply them in appropriate ways to their own situations. In this manner, it is possible to make use of the best that research has to offer and thus to progress to higher levels of accomplishment.

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The F.F.A.

... adequate or inadequate as a training device for future rural leaders?

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C. S. McLearen

THE primary aim of the Future Farmers of America is the development of agricultural leadership, cooperation and citizenship.

Listed among the twelve purposes for which the F.F.A. organization was formed are the following:

(1) To develop competent, aggressive rural and agricultural leadership and (2) To develop character, train for useful citizenship and foster patriotism.

As a foundation for sound training for rural leadership it is doubtful if much better aims and purposes could be compiled.

When the F.F.A. came into existence something was added to vocational agriculture. It proved an unusual and effective teaching device. The boys' point of view regarding agriculture shifted considerably. Farming took on dignity and value. There was an interest and renewed enthusiasm for farm life that was not there before. There was a new appeal and a challenge that brought out the best in the individual. That same spirit and enthusiasm still continues. The men who laid the foundation "built better than they knew."

Vocational agriculture is a vital force for the development of leadership. The F.F.A., the intra-curricular activity of vocational agriculture is one of the chief tools to accomplish the development of dynamic, effective leadership for America today.

There is concrete evidence that the F.F.A. has contributed in a very large measure toward training for dynamic useful leadership.

A Shared Task

Training of leaders is not a responsibility of our departments of vocational agriculture alone. We are not adequate to do the complete job nor should we pretend to be. We are adequate to do a large part of the job very effectively and the F.F.A. is probably our most potent medium to that end.

It has been said "the world needs differences and that the best in each youth shall be developed. Education above the common elementary foundation must be as varied in its possibilities as natural man is." The F.F.A. over the years has furnished a lot of the variables needed. We must realize the part the total school program, the home, the church and other agencies or organizations may contribute.

The real excellence of the F.F.A. cannot be measured by the degree to which

it enables its pupils to do well in a judging contest, a cooperative test or examination with high scores. It depends upon the value, quality, and different real life experiences which the program provides and the type of individual that develops from those experiences.

True Leadership of Adviser Is Essential

The F.F.A. is for the boys. Nothing will kill its effectiveness and interest more than teacher and supervisory domination and work. Leadership training must be realistic and not theoretical. We believe in "Learning by doing." Ample opportunity must be provided to make training realistic. One of the main secrets of any leadership training program which hopes to be successful rests on the ability of the supervisors and teachers to delegate responsibility to members themselves. Adviser guidance and direction is necessary but not enough that individual and group initiative, responsibility and freedom of members is taken away.

We hear teachers of agriculture say, "I don't expect to teach long. I expect to use vocational agriculture as a stepping stone to something else. It's not good enough for me." Truthfully, how many of such men are good enough to be advisers to F.F.A. chapters?

No organization becomes and stays great that does not have high ideals, great hopes and large ambitions. Those ideals, great hopes and ambitions must crystallize in the minds of all the leaders and members of a democratic organization before they become alive and influence the organization. The key person in the F.F.A. is the adviser, a regular teacher of agriculture. That person must have the "feeling" for the program and the ultimate development of honest, worthwhile, morally sound, efficient individuals. He must possess and use a system of moral principles, that embodies the spirit of the "Golden Rule." A good adviser knows he has a responsibility to his school, to his community and to his profession. He must have the qualities of leadership and the necessary courage to exercise real leadership on all occasions.

Spencer said, "Not education, but character is man's greatest need and man's greatest safeguard." The type of advisers to help develop character and the type of leadership needed in rural America today may well be the answer to our adequacy or inadequacy.

Planning Is Required

Presumably we have the F.F.A. to promote desirable learning. If that is not so it should have no place in the work of the teacher of agriculture.

Teachers of agriculture as a whole are noted for their emphasis upon planning. We hear a great deal about too

many F.F.A. activities and contests. Wise planning by the adviser and his students in the selection of contests for them to engage in is one step toward a proper balance for the whole program of vocational agriculture. Before a chapter becomes involved in a case of "contestitis" it should weigh the results very carefully.

In many cases federation, state, and national contest set-ups are the real cause of too much time being spent on contests as such. Unless chapters enter all contests they have no chance to win Federation or State Chapter contests, so consequently they enter all contests and defeat the real purpose for which the competition was intended.

We have heard teachers say, "Without F.F.A. I would not teach vocational agriculture." Some of these men are prone to spend too much time on F.F.A., so that the total program, the foundation of a strong F.F.A. chapter is weakened. The F.F.A. is not the body of vocational agriculture but it has certainly become heavy and may well be regarded as the part of the program that "wags" it in a lot of communities. I do not believe that the men responsible for the F.F.A. ever expected or wanted that to happen. True, F.F.A. is an intra-curricular activity that exerts a tremendous influence for good, especially in leadership training, but vocational agriculture is still the fundamental program. A great deal of leadership training can result from work in vocational agriculture that cannot or should not be tied directly to F.F.A.

Without a sound program of vocational agriculture based on needs of the community and of the individuals, the F.F.A. is entirely inadequate.

Presumably we have the F.F.A. to promote desirable learning. If that is not so it should have no place in the work of the teacher of vocational agriculture. Educational growth of the students is more important than contests won and records made by them. The development of leadership plays an important part in the educative process.

Dealing in generalities usually does little good. It may cause arguments and from the arguments some desirable action may be taken.

Some specific recommendations that may keep the F.F.A. adequate to do that important job of helping train real leaders that our country so desperately needs are as follows:

1. Properly integrate the F.F.A. into the total program of vocational agriculture.
2. Discontinue parts of contests that defeat the real purpose of contests before they are held.
3. Recognize the part other agencies play in leadership training. Supplement but do not duplicate effort.
4. Provide boy initiative and participation, not adviser domination and doing.
5. Strengthen the moral, social and religious activities entered into by many chapters. Good people are essential if our country is to stand the test of these times. We can do more in this area with F.F.A.

(Continued on Page 167)



Gilbert Fisher with his teacher of agriculture K. H. McIntyre, looking at one of his sows and her litter of pigs. In the background is a central farrowing house that is used by Gilbert for his sows at farrowing time. This is a part of the livestock improvement program that Gilbert owns jointly with his brother Sullivan who is a former F.F.A. member.

F.F.A. strengthens instructional program *

GEORGE W. SLEDGE, Teacher, Millbrook, North Carolina

HOW do I use the F.F.A. to strengthen my instructional program? First let us mentally survey the field of F.F.A. What do we think of first? Not that the F.F.A. is an integral part of vocational agriculture or that we can necessarily use it to a great advantage in our all-day instructional program. But we think of F.F.A. as a sideline to our program. I have heard teachers say (1) there are too many contests sponsored through the F.F.A., (2) my F.F.A. program is not as strong as it should be, (3) it is hard for me to develop much interest in F.F.A. work, or (4) why should I sacrifice the time from my teaching course to play with F.F.A.? As if to say that no good could come from F.F.A. work as such.

My experience as a teacher of agriculture has been relatively short, but my short experience as a teacher of agriculture has borne out a fact that has long been instilled into me. That fact is that the F.F.A. can and will better any student in any of our classrooms—provided the teacher of agriculture understands and sees the values underlying the entire F.F.A. program. As a student in vocational agriculture in high school, I experienced some of my most sought for goals and cherished awards for the training, experience, and participation in F.F.A. activities. I am of the opinion that if I as a student took pride in my F.F.A. experiences, that my agricultural students today with the proper perspective given them will

find a like satisfaction in doing work through the F.F.A.

Our most noted educators of today are of the opinion that the understanding of objectives by students and an incentive to learn for a purpose is a driving force that will aid our educational movement and attainments. Boys by nature are competitors. They play basketball, football, or baseball to (1) win for their home team and (2) to develop their bodies and minds to physical and mental capacities of alertness. What are some of the results of such sports? (1) They develop a sense of sportsmanship, (2) a sense of fairness, (3) pride in cooperation and team work, (4) their bodies are built up physically, (5) their minds are made more alert by thinking in action, by meeting situations and having to respond to them.

F.F.A. and Proficiency in Farming

We are teachers of agriculture. Our purpose primarily is to teach proficiency in farming. There are others, of course. In teaching a class of students we must use the resources at hand to get our points across to each student. If in some way we can interest students and put a purpose or need for learning into their minds, then half the job of teaching has been accomplished. Our job is to teach proficiency in farming. My question to you now is, "Why can't we use our F.F.A. program to serve as our primary stimulus in a good instructional program?" To those who say there are too many contests and activities in F.F.A., I say that they are not using

the F.F.A. to strengthen the instructional program in vocational agriculture. Why? Perhaps, because they do not take the time to organize and correlate F.F.A. work with the teaching of agriculture.

During this last year our State F.F.A. association sponsored a total of 15 contests, some for chapter groups, but the majority for individuals. Fifteen contests to be sure are a lot of contests, but they all have their merits. For instance, we teach production of crops and livestock, approved practices and methods of bettering quality through selection of good seed, feeds, and fertilizers. In order to strengthen both the F.F.A. and the instructional program, why not encourage students to compete for the supervised farming awards? Students today seem to be going through a process known as "gimme." My contention is no "gimme" unless some work is done by the student.

By encouraging competition in the state supervised farming contest many of us would not have to worry about the lack of projects selected by our students. Teach what students have and what they need. By making sure they have suitable projects, our instruction then will be bettered due to the fact that students have a need for it. Believe me, I have found out about that.

In the case of public speaking contests sponsored by the F.F.A., we have a wonderful opportunity to teach leadership and character building. This can be done by tying the classroom subjects to such events and having the students that are participating in the public speaking contest present their speeches to the chapter, at the same time developing a keener interest in the event. This contest gives practice to the participants, and gets across a lesson in agricultural instruction at the same time, whether it is on a topic such as soil erosion control or the advantages of farm life.

Tying Contests Up With Instruction

One way I have used a local federation contest to better my instructional program is through increased student participation. In the lecture-demonstration contest I require each student from freshman to senior to prepare either an individual or team demonstration with each student sharing in the responsibilities. Students spend as much as 8 to 10 hours in assembling materials for their demonstrations and in reading up on the accompanying lecture. Two of my boys this year decided to give a demonstration in throwing and castrating a large bull. They secured a Holstein hide from a local farmer, built a dummy form and draped the skin over the form. They studied textbooks on the anatomy of the reproductive system of bulls and finally drew a large blackboard sketch of this system. In the demonstration they used the rope method of throwing the dummy bull and used the emasculator. In the lecture they explained their procedure, the precautions to take, and pointed out on the sketch the effect of this method. This team won in the chapter and later in the Federation Contest. About a month ago I took the class in which these boys were in, out

(Continued on Page 167)

*Talk presented at North Carolina Teachers Conference, 1951.

Farm safety award

M. B. JORDON and W. C. GEIGER, Teachers, Fort Pierce, Florida

TO the Fort Pierce Chapter, Future Farmers of America, Farm Safety was presented as having a three-fold meaning. First, it meant that each of the 103 members had to have a broad understanding of what "farm" or "farming" meant. In its true sense, a Future Farmer could mean that in the future a member was to operate a large wheat farm with all its power equipment in Kansas. It might mean to operate a large cattle ranch in Texas, or a general farm in Alabama, or an intensified vegetable farm in the Florida Everglades, but most likely in their chapter it would mean to operate a citrus grove in St. Lucie County. When marketing is included, in either of the foregoing farm situations, there are present many operations and each operation would mean the presence of many hazards.

Secondly, it was the teacher's responsibility to teach each of the 103 members of the Fort Pierce Chapter the real significance of what a safety hazard is; how to discover its presence; and last, but not least, what to do about a hazard, which, after all, is the essential part of the entire farm safety program—the ability to recognize a hazard together with the knowledge of what practices and precautions to observe in overcoming and eliminating a hazard. This was their interpretation of the true meaning of farm safety.

Since the school farm is eight miles from school, and many class periods were to be spent on the farm, field trips were made to nearby farms, as well as to the Branch Experiment Station, more than fifty cattle in boys' supervised practice programs had to be transported, it is no wonder that more than fifteen activities were engaged in by the Fort Pierce F.F.A. boys in transportation alone, each of which involved many safety hazards.

Using tools and equipment when their F.F.A. Chapter is engaged in farming practices on a 640-acre farm, is really important. Each tool, regardless of whether it is a power or hand tool, does represent a hazard.

Because the school farm is stocked with cattle and hogs, this gives rise to another series of safety hazards. These are multiplied many times when some individual F.F.A. members own as many as 300 Brahman cattle.

Farm shop work, including acetylene and electric welding, hot and cold metal, woodwork, pipe and engine work, seems to generate safety hazards, especially with a group of 18 to 20 boys from the eighth grade.

Using chemicals is a "must" in the production of citrus and tomatoes, the two main cash crops in St. Lucie County. The advent of parathion, the "wonder" pesticide, brought with it a number of new safety hazards, important to each F.F.A. member.

Using inflammable materials, when almost all equipment is motorized, including pumping units for irrigation and

drainage, together with inflammable fungicides and pesticides, seemed to multiply the number of safety hazards for all F.F.A. members. Preventing fires must go along with inflammable material, and a large acreage of native grass land and a 25-acre forest area of slash pine on the school farm, added more safety hazards in fire prevention.

With 98 per cent of the F.F.A. members in the chapter using electricity in their homes and all farm shop power equipment operated with electric motors, caused many safety hazards to be recognized in the use of electricity.

Practicing sanitation was almost a



J. W. Jones of the Fort Pierce Chapter receives a check for \$100 and a certificate from the Future Farmer Foundation for his chapter's first place winning in the Farm Safety Award.

"must" for most of the F.F.A. boys because mosquitoes and sandflies were obnoxious hazards that do not have to be looked for. They find you. Water supply during the hurricane season presents many problems in drainage, as well as sewage disposal in septic tanks.

To do the job well was no small problem when it came to devising ways and means of promoting safety through the F.F.A. Chapter, in an organized way. Some of the devices used were as follows:

1. Conducted a school survey on safety.
2. Prepared a series of news stories for the local newspaper and radio station.
3. Conducted an eighth grade (200 pupils) poster contest on farm safety.
4. Prepared a farm shop safety code.
5. Taught units to classes on farm safety.
6. Prepared a school bicycle safety code.
7. Stressed safety with school boy patrol.
8. Conducted an F.F.A. tractor rodeo on school farm, stressing safety. ●

Improving supervised farming

(Continued from Page 161)

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Our cover

FRED MIYAJI, a veteran of the 100th Infantry Battalion is a former institutional on-farm trainee. At present he operates a family farm with his wife and two children, concentrating mostly on the production of papayas and truck crop. He was a delegate to the 1951 Young Farmer conference from the H. H. Gibson Chapter, Hawaii.

American education has long been at war with ignorance and greed, prejudice and evil. These are its enemies of old. They are its enemies today. The cause of education remains the same; only the form of the struggle has been changed. Never was there a time when the profession of education carried such a heavy responsibility, never a time when its members might feel a greater pride in the significance of their work, never a better opportunity to serve.

—Educational Policies Commission

Enrollment in federally-aided vocational classes increased in 1948-49 to an all-time high, slightly above 3 million.

Summer experiences in student teaching

EDWIN JAENKE and CHARLES W. FECHTIG, Senior Students Agricultural Education Division, University of Illinois

WHO would have thought that we as two student teachers would ever have met two hundred and seventy-five individual people within two short weeks during our student teaching experience this summer?

Why did so many of these fine friendly Jasper County, Illinois people say, "Oh yes, we knew you student teachers were going to be here this week. We read about it in the paper." Each of the two local newspapers carried a short article the week before our arrival giving our names, our home towns, and briefly described the work we would be doing as student teachers in the community under the supervision of Mr. Paul Walker, the local vocational agriculture teacher, and the College of Education at the University of Illinois.

A local radio station newscaster awakened us early the first Monday morning we were in the community telling the 12,000 people living in the community that we had arrived. The following Saturday morning we told the people of this community what we had done as student teachers with Mr. Walker during the past week, and how we had appreciated their friendly hospitality. This was made possible through a tape recording which we made for the 212th regular Saturday morning broadcast of the "F.F.A. News and Vo-Ag News" program of the local department.

Making Personal Contacts

Personal contacts are what count in getting acquainted with a community. To sell 'em, you have to make calls. Personal introductions during the two weeks included extremes from meeting ex-Congressman Laurence J. Arnold and Bank President William Schackmann to an interesting fifteen minutes spent one afternoon talking with a couple of well diggers at a farm. We learned (from them) that one of the well diggers was an ex-penal farm inmate and a previously incarcerated inmate of the state insane asylum. Others we met were 20 high school students, 34 business men and women, 70 dirt farmers, 4 teachers, 3 agriculturalists and 10 others of miscellaneous occupations and vocations including one retired professional golfer.

Burl Ives, nationally known ballad singer and movie actor, was born and raised in this county and graduated from Newton Community High School. Not every vo-ag student teacher has visited the Ives' parental home and has drunk clear sparkling cool water from the pump in the backyard. We have.

Conferences between student teachers and their cooperating resident teacher trainer are important. We spent most of our conference time on wheels. As we traveled from farm to farm we discussed personalities, soils, crops, community history, family relationships, topography, and spittle bugs. Tentative classroom teaching procedures during the coming school year as they related

to the home farm situations we were observing over the Jasper county countryside were discussed. Spot mapping the location of each farm visited will be of value when we return to the community during the school year.

New and Valuable Learning Experiences

Participatory experiences included a variety of skills: converting ambitious bulls to docile steers; judging the horticulture exhibits at the Jasper County Fair; advising F.F.A. Chapter officers in their organizational weekly meeting; teaching a G.I. Farmer Veteran Class some soil conservation principles; arranging a field trip for them to visit a local seed cleaning establishment; learning to operate a film strip projector; showing some slides; and operating a tape recorder that included three regular Saturday morning broadcasts. There was a degree of professional satisfaction and perhaps some surprise when the mother of an incoming freshman F.F.A. boy answered our question, "Mrs. Smith, what do you expect the high school vo-ag department to do for your boy?", with, "It should be a 50-50 proposition. He must do his part and the school must do its part." That was good enough for us.

We photographed the interesting scenes on the farms we visited. These pictures in black and white will be used on an opaque projector next winter in classroom instruction with the high school boys and the adults. We made some colored slides that will make interesting combinations for future meetings.

The principal of Newton Community High School gave us valuable advice and suggestions in the two regularly scheduled fifteen-minute interviews that were arranged for us.

Dr. Marshall Scott our supervisor from the Agricultural Education Division of the University of Illinois spent one day each week with us. He traveled with us through the community and offered much valuable advice and suggestions in farm visitation procedures. Conference time was on wheels.

Competition is keen in Jasper County, Illinois regarding the possibility of someone raising a litter of pigs that will outweigh the present champion 418 pound 56-day litter record held by an F.F.A. member, Don Hall. Our last night in the community, we attended and helped conduct the regular monthly meeting of the Jasper County Swine Herd Improvement Association.

At the end of the two weeks' participatory experiences, outlined briefly above, we believe we are ready to understand the problems necessary to making our Teaching Plans and Units that will be integrated with the teaching schedule when we return to the school next winter. The best source of class materials and field trips are within the community. We know the people and

many of their problems, a valuable source for teaching aids.

Observational experiences were less opportune than participatory experiences during our two weeks at Newton. This is as it should be in vocational instruction—learning to do by doing and not just standing around and watching. We did watch the livestock judging for two days at the county fair. We talked with a number of breeders, and secured their names and addresses for future use when boys in our own department will be looking for good livestock. We can recommend what we saw at the Jasper County Fair. When the four fair directors from a nearby county fair association spent two hours talking with Mr. Walker about the plans and possibilities for putting on a Tractor Rodeo at their county fair similar to one Mr. Walker had promoted at the Jasper County Fair, we sat in on the discussion with our eyes and ears open and our mouths closed. Next year we too will have a tractor rodeo.

Hamilton James is a nationally known livestock auctioneer. His ads are to be found in all the leading breed magazines. On the last Saturday we were at Newton we accepted Mr. James' invitation to accompany him to the University of Illinois where he was the auctioneer at the annual Illinois Purebred Sheep Breeders Association Show and Consignment Sale at the University livestock pavilion.

Favorable Reactions

Departmental organization activities seem to occupy a minor role in the summer training activities at Newton. Yet they play an important part in the operation of this very efficiently organized department. Between times we studied and learned to use the standard Illinois system for filing bulletins and periodicals, secured library lists for use in our class instruction next winter, checked the available farm magazines, observed the storeroom arrangement and facilities, skimmed through the efficient office filing system and administrative office details handled by the friendly and cooperative vo-ag office secretary, Mrs. Helen Winter.

State report forms were explained, the reports and analysis sheets for the local high school administration were examined in the short time allotted for their analysis and study during the summer period.

Our two-week summer training experiences at Newton afforded us opportunities to make contacts which we do not expect to duplicate in our own new job in as short a time or in as complete a fashion. After all, our supervising instructor had been in that community and among those Jasper County people for many years. However, we know now there is consistent pleasure and satisfaction in the job of being a good vocational agriculture instructor with friendly farm and town people such as we lived among at Newton and in Jasper County, Illinois. There is no hesitancy or fear in the expectancy we now have toward returning to this community and this school with these high school boys and these adult farmers and business people for our teaching experience during the coming fall and spring.

Experiences and performance

A determination of the relationship between experience obtained in training and subsequent performance in teaching for teachers of vocational agriculture, and an examination of the process used*

DAVID ROSS McCLAY, Teacher Education, The Pennsylvania State College

The Problem



D. R. McClay

THIS study was an attempt to discover the relationship between experiences obtained by trainees during practice teaching and their performance as teachers during the first year of their employment.

1. To discover the kind and amounts of experiences obtained by trainees, whether they be trained in critic centers, in other agricultural departments, or "on-the-job" (in departments where the trainee served as the regularly employed teacher of vocational agriculture).
2. To determine the quality of performance attained by teachers of vocational agriculture during the first year of employment in the 14 areas of the teacher's job.
3. To determine which experiences received in practice teaching contributed most towards successful teaching; likewise, those experiences received which contributed little if anything toward teaching success.
4. To determine if the "manner" in which the directed participation experience was received by a student teacher is reflected in subsequent performance (i.e., Do teachers who were trained in critic centers have better, equal or less teaching success than teachers who received a different "type" of directed participation experience?).
5. To evaluate a procedure for determining relationships between training and performance.

Source and Nature of Data and Procedure of Treatment

Information and data concerning the 39 beginning teachers of vocational agriculture who were graduated from The Pennsylvania State College during the 1948-1949 college year provided the basis of this study. Twenty of these men obtained their eight weeks of directed training in critic centers, seven in other agriculture departments not critic centers but under teacher supervision, and 12 men were placed in "on-the-job" situations (without teacher supervision) for this phase of their training.

The check-lists in which were recorded the degree of the experiences obtained by the 39 men during practice teaching were made available to the investigator. Follow-up evaluations of the

beginning teachers' performance were made by a committee consisting of (1) an area supervisor of vocational agriculture, (2) a critic teacher, and (3) the investigator. The evaluations were made approximately one year after the men became employed.

The training obtained by the 39 men in each of the 211 experiences reported in the check-list was recorded according to amounts of training obtained and by training situation. The performance evaluations of the 39 men in the teacher duties identified through the follow-up evaluation instrument were recorded according to quality of performance and by training situation. These data were combined to form tables to show (1) the quality of performance attained by each of the 39 men in each teacher duty, and (2) the degree of training obtained by the men in each of the suggested training experiences found under the particular duty.

The relationship was found between amounts of training obtained by the teachers in a specific training experience and their subsequent performances as teachers in a specific teacher duty by noting the extent to which various degrees of training were followed by degrees of performance classified in six categories ranging from superior to no performance. For example, if all 39 teachers were evaluated as performing "superior" or "above average" for a teacher duty (under which the training experience being inspected is found), and all had reported complete training in the training experience, a very high or close relationship would be in evidence between the two. Should the 39 teachers not have received training in a specific experience, but have subsequent performance of "superior" or "above average," it was interpreted to mean that there was little or no relationship between training and performance.

A mathematical procedure for determining relationships was used to a limited extent primarily as support for relationships arrived at by inspection. This procedure placed an arbitrary value on the relationship between comparable levels of training and performance used in the study to arrive at a numerical value or "score" by which distinctions in relationship of training and performance could be made more readily than by simple distribution of cases.

Findings and Conclusions

The Extent to Which Experiences Were Obtained

Training was obtained by the 39 men to the greatest extent in the following areas: I (Getting established in a school and community); III (Teaching all-day groups and supervising farming programs); VIII (Organizing and maintaining facilities); and XIV (Professional improvement). Slightly more than

80 per cent of the 39 men obtained training in these areas of the teacher's job of whom the majority reported it obtained in "complete" amounts.

Less training was obtained by the men in areas: IV (Teach young and adult farmers); VII (Selection of pupils for vo-ag classes); XII (Promoting and publicizing the program); and XIII (Evaluate the effectiveness of the program). Thirty-five per cent of the 39 men obtained training in the experiences listed under Area IV, 20.17 per cent in Area VII, 38.5 per cent in Area XII, and 50.17 per cent in Area XIII.

A higher percentage of the men trained in critic centers and in other departments obtained training in the 211 items of experience identified in the check-list than did men trained "on-the-job." This observation suggests the "on-the-job" type of training situation should be avoided because of the lesser amounts of training obtained.

The Quality of Performance Attained

Highest mean quality of performance was found in Areas: I (Getting established in a school and community); XI (Keeping records and making reports); and XIV (Professional improvement).

Lowest mean performance was found in Areas: IV (Teach young and adult farmer classes); VI (Placement and follow-up of pupils); VII (Selection of pupils for vocational agriculture classes); and XIII (Evaluate the effectiveness of the program).

Comparable levels of performance for the three groups of trainees were found in practically all teacher responsibilities. The mean performance of the "on-the-job" group was very slightly below that of the other two groups.

It would appear that certain characteristics of the "on-the-job" type of directed training may provide experiences in training which compensate for the lack of training in the recommended experience as reported in the check-list.

Experiences Which Have the Greatest Relationship to Performance

All but 18 of 211 recommended experiences were found to be of value in training teachers as contributing toward desirable performance. The summary of the relationship found for the 211 experiences shows: two had very high-positive relationships, 25 had high, 85 had moderately high, 81 had light, and 19 had little or no relationship.

It was found that the greatest relationship between training obtained in an experience and subsequent performance in the teacher responsibility for which that training experience was intended was found in those distributions of cases which met one of the following characteristics:

1. Those in which relationship is based upon a distribution of cases in which there was little or no performance.
2. Those in which there was very nearly complete experience and uniformly desirable performance.
3. Those in which varying degrees of training were accompanied by varying degrees of performance in a pattern which showed throughout the range of the variation among

*Based on Doctoral Dissertation, Cornell University, 1951.

cases that as training increased, performance improved or as training decreased, performance declined.

A high relationship determined for distributions which met the characteristics of No. 3 (above) would appear to be most valid because it was borne out throughout the range of variation in both training and performance within the distribution.

It was found that the five areas (IV, VI, VII, XII, and XIII) in which least training was obtained by the 39 men, were the same five areas in which performance was of the lowest quality. This fact implies that unless men are trained in these areas they can not be expected to perform satisfactorily especially during the first year of teaching. This fact also presents the need for examining all areas of the teacher's job to determine whether or not beginning teachers can be expected to perform well in certain areas.

It is also observed that in the six areas in which the 39 men obtained most training (I, II, III, VIII, XI, and XIV) performance in general was of the highest quality attained by the men among the 14 areas. This implies that men who obtain complete training in those areas during practice teaching are more likely to perform well in them during their first year in teaching.

Evaluation of the Procedure of Determining the Relationship of Training and Performance

This study demonstrates a procedure for determining the relationship between training and performance.

The following conclusions concerning the procedure for determining training-to-performance relationships used in this study have been formulated during the progress of this research:

1. Even though a high or close relationship is in evidence for a particular training experience, this study does not ascertain that it is more important in the training program than an experience for which a lesser degree of relationship was determined. This conclusion suggests the need for other studies in order that findings may be compared.
2. An item of experience, in which training in the item had little or no relationship to subsequent performance, should not be deleted from the check-list of recommended training experiences until additional studies agree that training in the experience had little or no relationship to subsequent performance.
3. High-positive relationships between training and performance were found in case distributions in which the high degree of relationships was due to little or no training and little or no performance. Other studies should be made to determine if greater amounts of training result in higher quality of performance in these instances. One can conclude on the basis of this study that under similar situations, comparable relationships will be found.

F.F.A. strengthens instructional program

(Continued from Page 163)

to castrate some bulls for a local farmer to give them some actual experience. One of the older boys who had not seen the demonstration said he wanted to throw the bull, but could not figure out how to do it. Up stepped one of the boys who had participated in the lecture-demonstration contest and went through the entire procedure without a hitch. His experience in an F.F.A. contest had taught him and his classmates an effective lesson.

In parliamentary procedure, I find that if the students realize that as a chapter group we are constantly working for over-all recognition, students in each class really dig in to learn proper parliamentary procedure. In all cases, when chances avail themselves, students should be allowed to practice such procedure in every day events that concern them as a group.

Capitalize on Opportunities

All contests have their merits. However, if a teacher of agriculture goes out to do nothing more than win contests just for the sake of winning, he has completely missed the boat as far as using the F.F.A. for strengthening his instructional program. In the case of such events as tool identification or seed identification and judging, if a teacher does not correlate the recognition of seeds, plants, and shop tools to the problem of selecting seeds on the basis of quality, performance levels, or what functions a farm tool has, then he has lost a good teaching opportunity.

For our Father-Son banquet, the chapter decided on having a pig barbecue. Committees were appointed and each committee had its responsibility. The food committee members had never slaughtered or butchered a hog. I explained the procedure to them and left it up to them. As a group they purchased the hog, slaughtered it, scalded and dressed it. This experience gave them an ideal learning situation because they had a need for it. By doing the killing and cleaning of it they learned. From now on that particular group will not have to be shown how to clean hogs because they now know how. They gained valuable information from this doing process plus participating in a cooperative endeavor.

Team work is a goal to be accomplished. In the F.F.A. students are individuals but collectively they must function as a unit. Through planning a course of instruction to embody the F.F.A. and setting up worthwhile student and teacher objectives both for all-day study in regular vocational classes and for activities in the F.F.A., our instructional programs can be greatly improved. Thorough planning of any instructional program is half of the goal. By understanding the aims and purposes of the F.F.A. and by taking pride in the fact that your students develop in the way that you direct their possibilities for development, you can improve on your F.F.A. program and guide each student in his learning.

Summing It Up

In summary, I use the F.F.A. to strengthen my instructional program as follows:

1. I try to instill a feeling of competition in all F.F.A. activities.
2. I set up prize awards for F.F.A. chapter winners in several areas.
3. I give each student some form of recognition for a worthwhile accomplishment. This is done by our chapter F.F.A. news sheet that classes in agriculture rotate in putting out through the school, or through the county cooperative paper, and the local radio station. Boys are proud to see their names in print. It makes teaching easier when you have students who are cooperative and willing to work for some form of recognition.
4. I encourage student participation in all F.F.A. events and strive to have them feel a part of all we are trying to do.
5. I try to make them feel they have a part in the planning by setting up program objectives in F.F.A. with them at the beginning of each school year. They then understand why they are working for something and most of all what they are trying to do.

The F.F.A. is the instrument whereby our planning and proper correlation can be carried over the goal—that of bettering and strengthening our instructional program.

The F.F.A.

(Continued from Page 162)

6. See that individual needs of members are met but that less concentration of effort is put on a few students. The F.F.A. is for all of the members and not for only a few.
7. The proper correlation of contests and classroom work is essential. Any contest that is not the outgrowth of good teaching has no part in our program.
8. Hold a carefully planned leadership training conference for chapter leaders on State and Federal levels and be sure there is a carry-over back to the chapter and its individual members.
9. Change programs of work as community and individual needs demand and not as state or national programs dictate.

Will the F.F.A. be adequate to do its part in training future leaders of rural America? Undoubtedly it will if we realize some of its weaknesses, do careful planning to overcome these weaknesses and continue the fine and proved activities that have meant so much to rural America. We must have leaders that have the vision to look ahead, see the conditions, weigh the facts and make sound, fair decisions. As John Ruskin said, "Education is not telling a man what he knows not, but it is making a man what he was not."

Pictures of the month . . .

**A contest open to all teachers of
Vocational Agriculture and
farm veterans**

All Entries by

John H. Klipstein
Teacher Vocational Agriculture
Wausau, Wisconsin
Camera used: 4 x 5 Speed Graphic
Film, Super XX



V-BUTT WELDING

First Place ▽



BARNYARD PAVEMENT DEMONSTRATION

HOG HOUSE CONSTRUCTION



GRAND CHAMPION



